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THE

BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

REPORT FOR 1889.

Manchester:
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THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT OF THE DISTRIBUTOR FOR 1889.

The number of specimens sent is slightly below the average of the last seven years. The proportion contributed by each member is shown below, but the numbers must not be taken as denoting the comparative value of the parcels, some of the smaller being by no means the least important. A note-worthy fact in the year's distribution is the large number of Brambles; of the 365 covers of plants no less than 90 belong to the genus *Rubus*. In the case of more than 50 per cent. of the plants contributed, the number of specimens is less than ten, an extremely unsatisfactory state of things for the Critics, the Distributor, and the Club generally. Of well-marked species not asked for in the desiderata list but sent as vouchers for new counties a single specimen is sufficient, but in the case of critical plants such as the majority contributed to the Club it is important that a fair number, say 20 or 30 specimens, should be sent so that the determination of the Critics may be of use to most of the members. At present much of the Report must be useless except to the few largest contributors to whom alone nearly complete sets of the plants can be sent. When collecting for the Club, unless the plant occurs very sparingly, it is surely very little more trouble to get 20 or 30 specimens than 4 or 5, and a parcel containing a fair number of specimens of a few species is far more useful than a much larger one made up of 'odds and ends.'

The best thanks of the Club are due to the following gentlemen, who have kindly examined and reported on various critical plants: Prof. Babington, Mr. Bagnall, Mr. Baker, Mr. Beeby, Mr. Arthur Bennett, Dr. W. O. Focke, Prof. Hackel, Mr. Hanbury, Prof. Haussknecht, Mr. Townsend, and Dr. F. Buchanan White.

The following is a list of the parcels received:—

	No. of Specimens.
Mr. J. E. Bagnall, *A.L.S.*	111
Mr. Charles Bailey, *F.L.S.*	285
Mr. W. H. Beeby, *F.L.S.*	64
Mr. Arthur Bennett, *F.L.S.*	172
Mr. Henry Bromwich	208
Mr. G. C. Druce, *M.A.*, *F.L.S.*	168
Mr. Alfred Fryer	36
Mr. H. D. Geldart	69
Mr. J. E Griffith, *F.L.S.*, *F.R.A.S.*	92
Mr. James Groves, *F.L.S.*	234
Rev. Augustin Ley, *M.A.*	512
Rev. E. F. Linton, *M.A.*	276
Rev. W. R. Linton, *M.A.*	738
Mrs. E. A. Lomax	51
Mr. F. T. Mott, *F.R.G.S.*	60
Rev. W. H. Painter	83
Rev. W. H. Purchas	118
Mr. W. W. Reeves	12
Rev. W. Moyle Rogers, *M.A.*, *F.L.S.*	70
Mr. R. W. Scully, *F.L.S.*	116
Capt. J. H. A. Steuart	45
Mr. S. A. Stewart	44
Miss R. F. Thompson	25
Mr. R. F. Towndrow	79
Mr. J. W. White, *F.L.S.*	217
	3885

JAMES GROVES.

11th August, 1890.

Caltha palustris, *Guerangerii*, Bor. Bradley, S. Derbyshire, May, 1889. "The two characters relied upon to separate this variety from the type are not uniformly found together; narrow sepals being associated with a short beak, and *vice versâ*." 'Flora of Herefordshire' p. 9. The above remark is borne out by plants of Bradley and this district.—Wm. R. Linton. "I do not think that it is *Guerangerii*, accepting the fruit as belonging to the same plant as the flowers. According to Dr. Günther Beck's Revision (1886) of *Caltha* it would seem that the description of *Guerangerii* as having long-beaked fruit is scarcely accurate. I understand the real difference to be that in *Guerangerii* the ripe follicle tapers gradually into the beak, while in *vulgaris*, Schott (= restricted *palustris*) the follicle is abruptly contracted into the beak, the follicle being greatly inflated and gibbous at the apex on the inner side. I have no ripe follicles of *Guerangerii* but my half-ripe ones seem to favour the description of tapering gradually, which is very different from our ordinary *palustris*. Mr. Linton's fruit differs from both of the above in the remarkably straight dorsal edge of the follicle and according to this would come under the *Caltha læta*, Schott, N. & K., of Beck's Revision. This plant and *C. cornuta*, Schott, N. and K., (= *Guerangerii*) are the only ones Beck keeps up as species, out of a lot described by Schott, N. and K. My attention has chiefly been given to *C. palustris* and its forms, and I have no specimen of *Caltha læta*, but that is the plant to which I think Mr. Linton's example most likely belongs."—W. H. Beeby.

C. radicans, Forst. (forma) Yell, Shetland, 28th July, 1889. I send a few cultivated examples of this, the plant originally described by me as *C. palustris* var. *zetlandica*. As already recorded in the "Scottish Naturalist," subsequent observations have convinced me that the rooting stem is the only character not common to both plants; and as this character is very persistent in *radicans*, while the small prostrate forms of *palustris* (var. *minor* Mill, non Syme) cannot be induced to root, I should now place the Shetland plant under the former.—W. H. Beeby.

Barbarea intermedia, Boreau. Yeldersley, S. Derbyshire, June, 1889. Noticed in two fields about a mile apart. Sent as voucher for record.—Wm. R. Linton. A weak unsatisfactory state. Although the pods are erect I should not refer it to *B. intermedia*, the lateral lobes of the root leaves being very little developed and the stem leaves not being pinnatifid as in that species.—J. G.

Arabis sagittata, DC. var. *glabrata*, Syme. Sandhills near Darrynane, Kerry, 10th July, 1889. The usual sandhill form of this species in Kerry. Typical *A. sagittata* does not apparently occur on these sandhills.—R. W. Scully.

Cardamine flexuosa, With., var. *umbrosa*, Gren. et Godr. Burghfield, Berks, August, 1889. See Report, 1888, p. 200. Luxuriant specimens when over flower remind one of *C. amara*, L.—G. Claridge Druce.

Diplotaxis muralis, DC., var. *Babingtonii*, Syme. Near G. W. Railway, Warwick, September, 1889.—H. Bromwich. The stem is not sufficiently leafy for var. *Babingtonii*.—J. G.

Viola canina × *Riviniana*. *Hort.* Reigate; root from near Farnham, July, 1889.—W. H. Beeby.

V. lactea × *canina*. *Hort.* Reigate; root from Hedge Court, 28th July, 1889.—W. H. Beeby. Mr. Arthur Bennett also sends this and writes:—"I have in writing the labels unfortunately reversed the names, but the specimens are from the root named in Mr. Beeby's paper in 'Journal of Botany, 1889,' page 226. These are the later summer and autumnal state. I hope to supplement them next year by the summer flowering stage."

Polygala serpyllacea, Weihe, var. with upper part of the plant ciliate. Glen Fiadh, Clova, Forfar, 13th July, 1889.—E. F. & W. R. Linton. This does not seem to be more hairy than usual; I certainly should not call it ciliate.—J. G.

Arenaria hybrida, Vill. Near Thetford, Norfolk, 14th June, 1889.—H. D. Geldart. "Mr. Geldart sent me specimens which I so named, but I think it is hardly the plant of the Rev. W. W. Newbould from Redneck Heath."—A. Bennett.

Sagina maritima, Don, var. *densa*, Jord. (Two forms.) Sandy sea-shore Ballybunnion, Co. Kerry, 25th July, 1885.—S. A. Stewart. "The prostrate plant I have called *densa* for Mr. Stewart. It connects the Christchurch (Hants) plant with *debilis* from the Hebrides. The other specimen would, I believe, have been called *stricta* by Fries."—C. C. Babington.

S. apetala, Linn., var. *prostrata*, Bab. Gravel walks, Milverton, Warwickshire, August, 1888.—H. Bromwich. "I think so, but only a form produced by the place of growth, although marked there."—C. C. Babington.

Impatiens parviflora, DC. Railway bank between Disley and Whaley Bridge, Cheshire, 27th July, 1889.—Charles Bailey.

Ononis repens L. var. *horrida* Lange! Notes on the wild plant will be found at pp. 66-67 of the 1882 Report. The specimens now sent are from seeds gathered on Yarmouth Denes, and sown in ordinary garden soil with a slight admixture of Redhill sand. The second year they commenced to form trailing branches, and in 1889 they flowered profusely; at the same time the branches that ultimately ended in a flower spike produced spines, thus agreeing with the wild plant, which I had observed never produced spines until the third year of growth from the seed! It seems to me that these spines are produced each year by the branches that flower; this may be modified next year, but at present it seems to point to such being the case. As will be seen these cultivated specimens are greener, less robust (but this may be from being only seedlings) than the wild examples I distributed in 1882, but they seem quite as viscid. I dried a series in flower and fruit for the members. I hope to supplement these in a few years time by examples from the same plants.—Arthur Bennett.

Medicago denticulata, Willd. var. *lappacea* (Lam.) Waste ground, Kenilworth, Warwickshire, Sept. 1889.—H. Bromwich. "This seems the plant of the Flora of France (Gren. and Godr.)"—A. Bennett. "Typical *denticulata*."—J. G. Baker.

Trifolium agrarium, Linn. Arable ground, originally sown as fodder, now fallow, and on which these are probably 'self-sown.' Boat of Garten, Easterness, Aug., 1889.—G. C. DRUCE.

Oxytropis campestris, DC. Glen Fiadh, Clova, Forfar, 13th July, 1889. In very fair quantity both on the rocks and on slopes of débris; pretty safe from extirpation, as so many strong tufts of this deep-rooting plant are inaccessible to men and deer.—E. F. and W. R. LINTON.

Vicia Cracca, L. var. *incana*, Thuill. Steep grassy bank in the open part of Clova valley, Forfar, 17th July, 1889. I owe the suggestion of the above varietal name to Mr. Arthur Bennett. The plant was remarkably dwarf and condensed in habit, and the peduncles appeared to be much shortened, remaining so in the few cases in which the pods were well formed. The situation was not an alpine one, being some distance below Kirktown of Clova.—E. F. LINTON.

Rubus. The Club is greatly indebted to Professor Babington for the care and attention he has given to the unusually numerous representatives of this genus. When sending his notes the Professor writes:—"I am sorry to make the usual remark that the specimens of *Rubi* are often very far from satisfactory, from bad selection and imperfect preservation, and that in most cases the characters derived from the *direction* of the stem and the *colour*, *direction* and structure of the flowers are not recorded. These characters cannot be seen satisfactorily, or even at all, on the specimens sent. Collectors have little idea of the care required in selecting, collecting, and drying brambles so as to be of any use to students."

R. sulcatus, Vest. Boggy wood, Lyonshall, Herefordshire, 18th July, 1889. This is the same plant as that mentioned at p. 173 of the "Report" for 1887 under this name, but referred by Dr. Focke to *R. carpinifolius*, W. and N.—AUGUSTIN LEY. "It does not agree with my foreign *carpinifolius*."—C. C. Babington.

R. affinis W. and N.—Canford Chine, (between Poole Harbour and Bournemouth) Dorset, 19th July, 1889. Also West Cliff, Bournemouth, S. Hants, 22nd Aug., 1889. Dr. Focke accepts these as the true *R. affinis* of Weihe and Nees. He was with me when I gathered the Canford Chine specimens, and he afterwards saw the West Cliff, Bournemouth, bushes. I have seen quite the same bramble in Teign Valley, S. Devon, and in several places in East Dorset and S. Hants.—W. MOYLE ROGERS. Prof. Babington agrees to this name.

R. ——. Ludford Park woods, 2nd October, 1889. A plant from near the above station, which I believe to have been identical with the plant now sent, was said, in 1881, by Mr. Archer Briggs, to be very near "*R. silvaticus*, W. and N." I do not know what to call it. It is abundant over about three miles of wooded hill in the district from which I send it, and occurs also in other parts of North Herefordshire. The stamens are white; the pistils light green.—AUGUSTIN LEY. "This seems to approach *R. nitidus*, but that is a plant of which I have no satisfactory knowledge."—C. C. Babington.

R. affinis, Bab. non W. and N.; Baker. On the quarry railroad side between Cwm-y-Glo and Llanberis, on the north eastern side of Llyn Padarn, Carnarvonshire, 13th September, 1888.—CHARLES

BAILEY. "*R. carpinifolius*, W. and N.? The leaf of the barren stem is more roundish than is usually the case in *R. carpinifolius*."—Dr. W. O. Focke. "I incline to think that this is *affinis* although Dr. Focke says *carpinifolius*. I do not understand his *carpinifolius*; it seems clearly not to be ours."—C. C. Babington.

Rubus affinis, Bab. non W. and N.; Baker. Bush on the hill below the Rutherford obelisk, Gatehouse of Fleet, Kirkcudbrightshire, 19th September, 1889. New County record.—CHARLES BAILEY. "This may be *R. Bakeri, i.e. hamulosus*."—C. C. Babington.

R. affinis, Bab., non W. and N. Variety near *R. Bakeri*, F. A. Lees; Baker. Road from Taxal to Whaley Bridge, Derbyshire, 27th July, 1889.—CHARLES BAILEY. "*R. hamulosus* = *Bakeri*, I suppose."—C. C. Babington.

R. affinis, Bab. non W. & N.; Baker. Hedge near Kirkcudbright on the Auchencairn road, Kirkcudbrightshire, 19th September, 1889.—CHARLES BAILEY. "I think it is our *affinis*." C. C. Babington. "*R. rhamnifolius*, Auct. I find no real difference between this and the *R. rhamnifolius* from Newton Stewart, 21/9/89."—Dr. W. O. Focke.

R. Lindleianus, Lees. Leigh Down, N. Somerset, 18th September, 1889.—J. W. WHITE. "A poor specimen, but probably *Lindleianus*, although differing very much in appearance from the luxuriant specimens."—C. C. Babington.

R. rhamnifolius, W. and N. *R. cordifolius*, Rub. Germ. Wych, W. Gloucestershire, 10th September, 1889. This form is frequent in the Bristol district. It seems to me only a very robust state of *R. rhamnifolius* W. & N. differing but slightly from the ordinary plant in its cordate leaflets with fine serration and pale undersurface, and less dense panicle. Is it what Prof. Babington speaks of as "our old *cordifolius*," and the *cordifolius* of 'Rubi Germanici?' If not, what is that plant? And, in any case, what is the plant bearing this name that is placed under *affinis* in the last Lond. Cat.? Prof. Babington says ('J. of B.' July, 1886) that *affinis* is "the *R. cordifolius* of Baker." But I have specimens of both *affinis* and *cordifolius* named at the same time by Mr. Baker. How then can the two be one? I shall be thankful for enlightenment on this matter.—J. W. WHITE. "The leaves are bad. Not *cordifolius*, W. and N. As far as I can judge concerning it, the terminal leaflet seems to lie between those of the extreme *rhamnifolius* and *cordifolius*, therefore best call it *rhamnifolius*. The *affinis* issued by Leighton (No. 4) is very like this, and ought probably to go to *rhamnifolius*."—C. C. Babington.

R. rhamnifolius, W. and N.; Baker. Roadside, near Newton Stewart, on the Wigtonshire side of the River Cree, 21st September, 1889. New County record. Name assented to by Dr. Focke.—CHARLES BAILEY. "If, as Focke says, this and the Kirkcudbright plant are the same, it is clear that our idea of *rhamnifolius* differs greatly from his."—C. C. Babington.

R. rhamnifolius, W. and N.; Baker. Roadside, Leigh Woods, opposite Clifton, N. Somerset, 15th October, 1888.—CHARLES BAILEY. "Is not this *R. ramosus*, Bloxam, in one of its forms?"—C. C. Babington.

Rubus rhamnifolius, W. and N.; Baker. Hedge near the Railway Station, Chatburn, S. Lancashire, 23rd September, 1889.—CHARLES BAILEY. "Is not this *R. ramosus*, Blox. in one of its forms?"—C. C. Babington.

R., doubtful between *rhamnifolius*, and *umbrosus*; Baker. Hedge at roadside in the neighbourhood of Mere, Cheshire, 31st August, 1889.—CHARLES BAILEY. "Is it not *R. Muenteri*, to which (combined with *R. Maassii*) my *umbrosus* will go?"—C. C. Babington. "I am inclined to put it under *umbrosus*, although I cannot find clear limits between the two forms."—Dr. W. O. Focke.

R. incurvatus, Bab.; Baker. Side of lane in the neighbourhood of Knutsford, Cheshire, 31st August, 1889. New County record.—CHARLES BAILEY. "I consent to this determination."—Dr. W. O. Focke. "Where is the felt? I think it must be referred to *R. nemoralis* (Müll.), probably under its form *R. Maassii*, or very near to it."—C. C. Babington.

R. incurvatus, Bab.; Baker. Open spaces in a disused slate quarry, Glyn, near Llanberis, Carnarvonshire, 14th September, 1888. Quarry wharf, Llyn Padarn, in the neighbourhood of Llanberis, Carnarvonshire, 15th September, 1888.—CHARLES BAILEY. "These apparently are *R. incurvatus*."—C. C. Babington.

R. ——. Abundant in Lyonshall park wood, 18th July, 1889. I believe this to fall under 435, *R. montanus*, Wirtg. It much resembles a plant sent by me to the Club in 1885 under the name of *R. Salteri*, Bab., but referred by Professor Babington to *R. montanus*, Wirtg. See Report, 1885, p. 125. It is also very near a plant sent under the name of *R. adscitus*, Gen., in 1886, which the same authority placed to *R. rusticanus*, Merc. See Report, 1886, p. 148.—AUGUSTIN LEY. "Is it not the *R. thyrsoideus fragrans* of Focke from Shirley, Derbyshire, of Messrs. Linton and Purchas (15th August, 1889)?"—C. C. Babington.

R. pubescens, W. and N.; Baker. On the road to Wookey, in the neighbourhood of Wells, North Somerset, 12th July, 1889. New County record?—CHARLES BAILEY. "*R. argentatus*, P. J. Müll."—Dr. W. O. Focke. "It is not like my authentic specimen of *argentatus* in Herb. Genevier. I have the plant from Weissenberg referred to by Focke, on page 198, and it can hardly be the same, neither do I call it *R. pubescens*."—C. C. Babington.

R. pubescens, W. and N.; Baker. Road to Charmouth, in the neighbourhood of Lyme Regis, Dorsetshire, 10th July, 1889. New County record?—CHARLES BAILEY. "I think so."—C. C. Babington. "*R. argentatus*, P. J. Müll."—Dr. W. O. Focke.

R. macrothyrsos, J. Lange. Flor. Dan. tab. 2832. Near Bangor, August, 1889.—J. E. GRIFFITH. "Of course Focke's determination (Rep. 1888, p. 211) must stand. I place it under *R. vestitus*."—C. C. Babington.

R. pubescens, W. and N.; Baker. Roadside near Dolbadarn Castle, in the neighbourhood of Llanberis, Carnarvonshire, 14th September, 1888. New County record.—CHARLES BAILEY. "No, I think it is *R. villicaulis*; it seems just like the plant so-named

lately by Focke for Mr. Painter."—C. C. Babington. "*R. macrothyrsos*, J. Lange. This plant, and that marked *R. Kœhleri* from Menai Bridge, 8th September, 1888, look somewhat different, but I think they are variations of the same species, *R. macrothyrsos*, known only from N. W. Wales, and from a few scattered localities in France and N. Germany."—Dr. W. O. Focke.

Rubus argenteus, W. and N. *R. erythrinus*, Genev. Hedges near Woollard, N. Somerset, Sept., 1889. Name given by Dr. Focke. I am not aware if *argenteus* has been previously recognized as British. It occurs abundantly in two localities, five or six miles apart; and is very different from all other Bristol brambles. In general habit it presents a close resemblance to *Lindleianus*, having the same pale tint of foliage, bright red stem, and leaflets essentially alike in shape and serrature. The armature also, both of barren shoot and inflorescence, is nearly that of *Lindleianus*. But the pilose stems, white felted leaves, and long, open leafy panicle are marked characters; and there is a constant occurrence of ternate leaves on the lower part of the shoots. Prof. Babington in the "British Rubi," referring, I presume, to *R. argenteus*, W. and N., says the true *argenteus* of France and Germany is more nearly allied to *discolor* than to *thyrsoideus*, but seems distinct from both. In the "Consp. Flor. Europ." Weihe's plant is placed as a variety under *R. pubescens*, a position that may fairly well suit it.—J. W. White. "I say the same of this as of Mr. Bailey's plant from Wells. Can they both be *R. gratus?* They are just like what I have so named from Festiniog."—C. C. Babington.

R. macroacanthus, Blox. Between Yeaveley and Stydd, Derbyshire, August, 1889. In company with the Rev. W. R. Linton, I found this bramble occupying an area of many acres almost to the exclusion of every other bramble; and while it was obvious to us that it was allied to *R. rusticanus*, Merc., it was equally obvious that it was not that. The panicles were frequently of enormous size, two to four feet in length; the leaflets were not convex and obovate, but flat with wavy edges and ovate acuminate; the prickles were remarkably long, both on the barren stem and the rachis; the flowers were very pale pink, the filaments red pink, the styles greenish. The Rev. W. R. Linton noted on a later visit to the spot that this bramble fruited freely. By the assistance of the Rev. W. Moyle Rogers, and by comparison with specimens in his herbarium, I arrived at the conclusion that it was the plant named *R. discolor*, var. *macroacanthus*, by the Rev. A. Bloxam; which is placed by Prof. Babington ('Brit. Rubi', p. 110) under *R. thyrsoideus*, Wimm.; but which I believe Dr. Focke, to whom a specimen has been sent for his opinion, separates from both these species. The name "*macroacanthus*" will require revision; but, as Prof. Babington has suggested ('Brit. Rubi') this may prove identical with some bramble already named on the Continent.—E. F. Linton. Prof. Babington writes: "It may be so. I think that there is no definite *R. macroacanthus* of Bloxam."

R. rusticanus, Merc. var. *macroacanthus*, Rub. Germ. Rough pasture, near Mordiford, Herefordshire, 22nd July, 1889. I venture

to give this name, on account of the exact similarity of the present plant to one picked in the same district of Herefordshire, upon which Mr. Archer Briggs writes to me: "This accords very fairly with the *Rubi Germanici* plate of *R. macroacanthus*." He adds that it "comes near *R. pubescens*."—Augustin Ley. "Focke tells us that the *R. macroacanthus* of Rub. Germ. was only a single bush, which was again found by A. Braun. It had a very broad and short-stalked terminal leaflet; this has a very long stalk. This is very like the *R. robustus* of Müll. (which Focke places doubtfully to *R. pubescens*) and my *thyrsoideus*, therefore probably a form of *R. pubescens*."—C. C. Babington.

Rubus rusticanus, Merc. var. *argenteus?* Caplar Hill, Herefordshire, 10th July, 1889. A plant from the same spot was referred to the above variety of *R. rusticanus* for me by Professor Babington about the year 1873. I have not now got the original specimens to refer to, and do not therefore know whether the plant now sent is identical with them.—Augustin Ley. "*Argenteus* of whom? It is a very variously-used name. I do not think it is the plant of Rub. Germ., but agrees very well with the *R. thyrsanthus* (Focke) Rub. Sel. No. 35 (originally issued as *R. candicans*), but not so well with the Swedish specimens, or with No. 12 of the 'Rubi Selecti.' It is apparently a new form of the aggregate species *R. thyrsoideus*, not our *R. thyrsoideus*, which is *R. pubescens*."—C. C. Babington.

R. ulmifolius, Schott, var. *pubescens*, Bab.; Baker. Foot of walls on south side of Carisbrook Castle, Isle of Wight, 6th October, 1888. Charles Bailey. "I agree"—Dr. W. O. Focke. "From the ticket I presume that Baker means *pubigerus* of the Man. Ed. 8. I do not now consider that to be a variety worth distinction from *R. rusticanus*. I hold to that name in place of *R. ulmifolius* for various reasons too many to detail here."—C. C. Babington.

R. leucostachys × *rusticanus*. Polstead, Suffolk, 12th September, 1889. This was about as clear a case for a hybrid as one could well have. There were two very large bushes near to one another which had been covered with blossom, and were sending out fresh flowering shoots from the base of the panicle. The summer-flowering panicles were all dead: not a single fruit had formed. The characters were intermediate between those of the supposed parents, both of which grew near. I have sent specimens to Dr. Focke, but up to date have not received his reply. There is, however, no doubt in my mind that the name given is correct.—E. F. Linton. "Of the two specimens sent one is apparently the lower *side* branch of the other. The long pyramidal panicle strikes one; I do not think there is such a form in either of the supposed parents. It approaches very near to *R. bifrons* (*R. speciosus*, Müll.), as shown in Schultz, Herb. Normale, sp. 350, quoted as authentic by Focke, but his own specimens are less like it, nor is it like what I have called *R. bifrons*. It is a very remarkable plant."—C. C. Babington.

R. leucostachys, Sm. (*R. vestitus*, W. and N.) A variation towards *rusticanus*. Leigh Down, N. Somerset, 15th September, 1889.—J. W. White. "A very poor specimen, but it looks like *R. leucostachys*."—C. C. Babington.

Rubus pyramidalis, Kalt. Mousehold Heath, Norfolk, 22nd August, 1887.—E. F. Linton. "Yes, according to Focke, but may there not be a mistake as it does not agree well, especially in the panicle?"—C. C. Babington.

R. pyramidalis, Kalt. Biddulph Hall, Staffordshire, Aug. and Sept., 1889. Named by Dr. Focke. Specimens were sent to him from the same plant as those mentioned in Report 1888, p. 207, as growing at Biddulph Hall and the Bride Stones, with this result. New County record.—W. H. Painter. "I consider this far more certainly correct than the previous plant."—C. C. Babington.

R. calvatus, Bloxam; Baker. Hedge near the bridge in the lane between Gisburn and Long Preston, Mid-west Yorkshire, 23rd September, 1889. New County record?—Charles Bailey. "*R. leucandrus* Focke"? Dr. W. O. Focke. "I see Focke suggests *R. leucandrus*. He kindly sent me this, but the specimens are not so good as usual with him. He recognised it as from Plymouth ('Synopsis,' p. 212)."—C. C. Babington.

R. melanoxylon, P. J. Müll; Dr. Focke. Shirley, Derbyshire, Aug., 1889. Seems only to differ from authentic *R. calvatus*, Blox. by the narrower more obliquely pointed terminal leaflet and the more prickly and setose panicle. W. H. Purchas. "This has manifestly had aciculi and probably setæ on the stem. It shows the unnatural character of our groups. I do not wish to differ from Focke, and hardly think it can be *calvatus*."—C. C. Babington.

R. calvatus, Bloxam! Shirley, Derbyshire, Aug., 1889.—W. H. Purchas. "If this is *R. calvatus*, Blox. we have probably quite the end of a stem for I do not think the furrows are found on it, except there. Focke calls Bloxam's plant in part *R. sylvaticus* as did Bloxam originally."—C. C. Babington.

R. carpinifolius, W. and N. non Bloxam. Near Rudyard Reservoir, Staffordshire, 16th Sept., 1889. Named by Dr. Focke.—W. H. Painter. "I suspect that this is *geniculatus* (Kalt.), a subordinate form of *R. pubescens*."—C. C. Babington.

R. villicaulis, W. and N.; Baker. Roadside, near the breakwater, Holyhead, Anglesey, 7th September, 1888. New County record.—Charles Bailey. "*R. pulcherrimus*, Neuman = *polyanthemos*, Lindebg. The true plant. In my herbarium this form is named var. *Griffithi*."—Dr. Focke. "Focke's determination is conclusive. I presume that it will go under his *Neumani* where Friderichsen and Gelert have placed *polyanthemos* and *pulcherrimus* and the whole stand (according to my idea) in the aggregate *R. nemoralis*, Müll."—C. C. Babington.

R. adscitus, Gen. Pengethly Wood, Sellack, Herefordshire, 18th Sept., 1889.—Augustin Ley. "Does this differ essentially from typical *R. villicaulis*?"—C. C. Babington.

R. gratus, Focke. Sand quarry, Berkswell, Warwickshire, September, 1889. On this Prof. Babington says "*R. gratus*. I think this is correctly named by you. It is nearer to *R. villicaulis* than to *R. Salteri*, I place it next to the former." I have compared my plant with specimens received through the Club from Rev. W. R. Linton,

from Shirley, Derbyshire, July, 1887, and think my plant is identical. This is the abundant bramble of the quarry from whence I send it, and is a most noticeable plant, first from its strong and vigorous growth, large conspicuous flowers, but also for the beautiful fruit which is the most delicious of any save that of *R. Balfourianus*.—J. E. Bagnall.

Rubus gratus, Focke. Mousehold Heath, Norfolk, 29th Aug., 1888.—E. F. Linton. "Yes."—C. C. Babington.

R. nemoralis, Müll. (*R. carpinifolius*, Bloxam, *R. Maassii*, Focke). Leigh Down, W. Gloucestershire, 25th September, 1889.—J. W. White. "I should rather say that it is the *R. Muenteri*, Focke, not *R. Maassii*, and both go under *R. nemoralis*."—C. C. Babington.

R. macrophyllus, W. and N., Branksome Chine, Dorset, 8th August, 1889. Also, Hinton Admiral, S. Hants, 12th August, 1889. The Branksome Chine specimens are from a widely spreading bush, or clump of bushes, pointed out to me by Dr. Focke, as just representing (except for the paucity of hairs on barren stem) *R. macrophyllus*, as understood by him. We afterwards saw it together in other places in E. Dorset and S. Hants. All the plants having more or less mixed armature on barren stem, with decidedly setose panicles commonly placed by us in England under *R. macrophyllus* as an aggregate species, he would put elsewhere, chiefly under *R. anglo-saxonicus*, Gelert.—W. Moyle Rogers. "I am glad to learn that Dr. Focke calls these the true plant as understood by him. He speaks of 'more or less mixed armature on the barren stem.'—I should say that these have it—'and decidedly setose panicles' which our plants usually have not as 'chiefly *anglo-saxonicus*' I do not understand."—C. C. Babington.

R. macrophyllus, W. and N.; Baker. Brookside, in the neighbourhood of Lyme Regis, Dorsetshire, 10th July, 1889. New County record.—Charles Bailey. "I consent."—Dr. Focke. "I presume it is so, but it differs much in appearance from the previous plant."—C. C. Babington.

R. danicus, Focke. Bemersley, Norton-in-the-Moors, N. Staffordshire, 12th August, 1889. See Report, 1887, p. 173.—W. H. Painter. "I think it is *R. danicus*, which I place under *R. macrophyllus* provisionally."—C. C. Babington.

R. macrophyllus, W. and N.; Baker. Growing with the ordinary form of *R. longithyrsiger*, Lees, on the roadside between Cwm-y-Glo and Llanberis, on the north-eastern side of Llyn Padarn, Carnarvonshire, 15th September, 1888 (with Mr. J. E. Griffith)—Charles Bailey. "Near *R. Sprengelii*, but the flowers are different. Perhaps *R. nemocharis*, Lefv. Müll. It is a peculiar plant. Genevier combines the *R. nemocharis* with *R. Sprengelii*, but he describes a plant which is not *Sprengelii*. His description agrees with your specimen. Genevier asserts that his *Sprengelii (nemocharis)* is identical with the *Sprengelii* of the Swedish authors, but this species does not grow in any part of Sweden whatever."—Dr. Focke. "I agree with Focke, that this is not proper *R. Sprengelii*, but then I think it is *R. Borreri*, published in 1845, and, as I fancy, the full-grown form of *R. Sprengelii; R. nemocharis* first appeared in 'Pollichia' for 1859, and seems a synonym of *R. Borreri*, not of the original *R. Sprengelii*."—C. C. Babington.

Rubus umbrosus, Auct. Angl. West Cliff Moor, Bournemouth, S. Hants; in plenty; 11th July and 1st August, 1889. Dr. Focke, who was with me when I gathered the 1st August specimens, would place them and all the "*R. umbrosus*" in the Bournemouth neighbourhood under *Muenteri* rather than *Maassii*, but he does not consider these essentially distinct. The following characters were taken from the fresh specimens:—Petals pinkish, roundish-elliptic, clawed, ciliate. Sepals, ovate-acuminate, green, white-bordered, reflexed. Styles and anthers greenish yellow. Filaments white, exceeding styles. The leaves are always of a dull opaque green above, and the terminal leaflet frequently divided.—W. Moyle Rogers. Prof. Babington agrees with Dr. Focke in referring this to *R. Muenteri*, which he places under *R. nemoralis*, Müll.

R. umbrosus, Bab. *non* W. and N.; Baker. Wood on the Auchencairn road, Kirkcudbright, 19th September, 1889. Hedge, near Borgue, by the side of a burn running into Kirkandrew's Bay, Kirkcudbright, 18th September, 1889. New County record.—Charles Bailey. "Near *R. pulcherrimus (polyanthemos)*."—Dr. Focke. Prof. Babington says of the Borgue plant: "I place to *R. nemoralis*. How are *R. polyanthemos* and *R. Neumani* to be distinguished? I see that they are combined as *Neumani* and *pulcherrimus* added by Friderichsen and Gelert. There is an old *pulcherrimus*, so that name cannot stand."

R. umbrosus, Bab. *non* W. and N. = *R. polyanthemos*, Lindeb.; Baker. Hedge on the roadside, Cauldside, near Whithorn, Wigtonshire, 20th September, 1889. New County record.—Charles Bailey. "Probably the same as the last, but there is no barren stem."—C. C. Babington.

R. macrophyllus, W. and N., *glabratus*. Pengethly and Rigg's Wood, Sellack, Herefordshire, 18th September, 1889.—Augustin Ley. "I think so."—C. C. Babington.

R. mucronatus, Blox. Bournemouth, S. Hants, 24th June, 1889. I send this as one of the characteristic *Rubi* of sandy and gravelly places in Mid-South England. It is especially abundant throughout East Dorset, and in the district lying between the New Forest and the Hants coast, to Southampton Common eastward, beyond which I have not looked for it. This year I have gathered just the same plant at Redlynch and Downton in S. Wilts, where it has also been found abundantly by Mr. E. J. Tatum, who has sent me specimens from Sedgehill and East Knoyle in the extreme west of that county, and also from Clarendon and Grimstead, east of Salisbury. Besides its very characteristic foliage, it is remarkable for its cup-shaped corolla, with petals (pure white or pinkish, elliptic or obovate) crumpled and fugacious. The stem is usually angular or even furrowed, only slightly hairy, with slender much compressed prickles, nearly or quite confined to the angles, and a few unequal scattered aciculi. These slender aciculi are usually very numerous on the panicle and readily rub off. Intermixed with them are a few setæ, usually very few, except in luxuriant specimens. Filaments white, exceeding the greenish styles, but afterwards reddening as well as the

inside base of the sepals. I cannot help thinking that this is the plant referred to in the "Flora of Hampshire" (where *R. mucronatus* is not given) under *R. macrophyllus*, var. *glabratus* as "Frequent about Bournemouth; very abundant on the East Cliff."—W. Moyle Rogers. "I presume it is *R. mucronatus*."—C. C. Babington.

Rubus, near *mucronatus*, Bloxam; Baker. On the road side, Cwm-y-Glo, on the north-eastern side of Llyn Padarn, Carnarvonshire, 13th September, 1888. New County record?—Charles Bailey. "I consent."—Dr. Focke. "I am glad to see that Dr. Focke admits this."—C. C. Babington.

R. Sprengelii, W. and N.; Baker. On the road side at the foot of the Clegir, on the north-eastern side of Llyn Padarn, Carnarvonshire, 13th September, 1888. New County record. Road side near Newton Stewart, on both sides of the river Cree, Kirkcudbrightshire and Wigtonshire, 21st September, 1889. New to Scotland.—Charles Bailey. "I doubt if these would be passed by Dr. Focke. Formerly we should have called them *R. Borreri*."—C. C. Babington.

R. rubicolor, Blox. Wet thickets, Howle Hill, Herefordshire, 26th July, 1889.—Augustin Ley. "I think it is very close to *Sprengelii*."—C. C. Babington.

R. velatus, Lef. Lyonshall Park Wood, Herefordshire, 18th July, 1889.—Augustin Ley. "Yes."—C. C. Babington.

Rubus, near *Bloxamii*, Lees; Baker. Hedge in lane in the neighbourhood of Knutsford, Cheshire, 31st August, 1889. New County record?—Charles Bailey. "*R. pyramidalis*, Kalt."—Dr. Focke. "Certainly very unlike what I have supposed to be *pyramidalis*, Kalt., judging from Focke's specimens which seem very near our *R. hirtifolius*. I think there must be some mistake here. Neither is it the *R. umbraticus* of Genevier. It is very like Mr. Ley's Welsh Newton Plant (21st September, 1885) called '*R. fuscus, forma hirsutissima parce glandulosa*' by Dr. Focke."—C. C. Babington.

R. rhenanus, Müll.? Rigg's Wood, Sellack, Herefordshire, 18th September, 1889.—Augustin Ley. "This is the plant Areschoug sent to Genevier as *R. Bloxamii* from Plymbridge, Devon (1871), and placed by the latter with *R. rhenanus*, Müll. May it not be distinct from both? Its leaves are very different. I do not call it *R. rhenanus*."—C. C. Babington.

R. thyrsiflorus, W. and N. Crackley Wood, Kenilworth, Warwickshire, 20th June, 1889. Specimens of this plant have been kindly examined by Prof. Babington, who says "that which you have called *R. thyrsiflorus* from Crackley Wood, Kenilworth, I consider to be a form of that species, but the *R. myriadenophorus* (Rip.) of Genevier's Monograph. If ours is really his plant, and it agrees well with his authentic specimens, the characteristics are not quite constant. It was first characterised in print in 'Gen. Suplt,' page 89, 1872. This is the first specimen I have seen of it from England; but I have not very carefully examined all my specimens named *R. thyrsiflorus* as yet, and may find it amongst them. On a hurried look I find what is probably the same from Rev. A. Ley as *Bloxamii* from Cowley Park, Malvern, 19th July, 1887, and from Dr.

Fraser from Wrottesley Wood, Wolverhampton, October, 1887." As I possess both specimens cited I have compared them with my own and find Mr. A. Ley's plant differs only in the presence of more hairs on the barren stem, and sepals scarcely so prolonged. Dr. Fraser's plant is like some of the states of the Crackley Wood plant, which is very variable. This is the chief bramble of Crackley Wood and the hedges of Crackley lane; it is also abundant at Corley, Hartshill Hayes, and Bentley Park.—J. E. BAGNALL.

Rubus thyrsiflorus, W. and N. Howle Green Wood, 26th July, 1889. I believe this to be the same plant as one sent by me last year from "Woods, Hope Mansel, Herefordshire," and referred by Professor Babington to *R. thyrsiflorus*, by Dr. Focke to *R. Lœhri*, Wirtg,—AUGUSTIN LEY. "Probably *R. thyrsiflorus*."—C. C. Babington.

R. scaber, W. and N. Peat moor, near Shapwick, North Somerset, 21st August, 1889. This has an unusual appearance, which I believe may be the effect of soil and situation. Dr. Focke considers that it agrees with *R. scaber* in all essential characters.—J. W. WHITE. "I am glad to see that Dr. Focke accepts this."—C. C. Babington.

R. rudis, var. *microphyllus*, Blox. Middleton Heath, Warwickshire, September, 1889. Upon specimens sent to Professor Babington, confirming my nomenclature, he says: "This is the *R. sertiflorus* (Müll.), of which the older name is *R. Löhri*, of Wirtgen (1857). Most of Wirtgen's specimens are rather larger than yours, but seem decidedly the same plant." I think by the laws of priority Mr. Bloxam's name should be retained, as he distinguished it as a "variety with very small leaves (*microphyllus*, Blox. MSS.)" in Kirby's Flora of Leicestershire, page 41, 1850, from the road from Swepstone to Heather, Leicestershire. I have plants from this locality issued by Mr. Bloxam in his fasciculus, with which the Warwickshire plant is identical. I have observed the plant since 1872 in the Middleton district, where it occurs abundantly on heathy footways, and although it has increased in abundance during these years, it has never shown any tendency to variation. The typical *R. rudis*, as understood in former years, grows near this variety, and is markedly different in appearance.—J. E. BAGNALL.

R. Radula, W. and N., Baker. Between Apesdown and Rowridge, Isle of Wight, 8th October, 1888.—CHARLES BAILEY. "*R. echinatus*, Lindl."—Dr. Focke.

R. Radula, W. and N., Baker. Between Cauldside and Glasserton, near Whithorn, Wigtonshire, 20th September, 1889. New County record.—CHARLES BAILEY. "*R. Radula*, W. and N. var."—Dr. Focke. "*R. Radula* var., remarkably few setæ and aciculi."—C. C. Babington.

R. Radula, Weihe. Carey wood, Herefordshire, 10th July, 1889. I send this as a pretty and distinct-looking variety of *R. Radula*. The long narrow panicle, with broad single, often three-lobed, leaflets, give it a marked appearance. It is scattered over some two or three miles of wood and hedge, and keeps its characters well.—AUGUSTIN LEY. "Yes."—C. C. Babington.

R. Bloxamiana, Coleman. Near Hartshill, Warwickshire, Sept.,

1879, and August, 1889. Wolvey, Warwickshire, 15th August, 1885. Austrey, Warwickshire, August, 1885. Stem arcuate prostrate angular. Aciculi few; *setæ many equal, very short. Hairs few or none.* Prickles *few, subequal, mostly confined to the angles, patent.* Leaves quinate and ternate, crenate serrate, all stalked, naked above, hairy on the veins, rarely felted beneath; terminal leaflet roundish cuspidate, with a subcordate base. Flowering stem prostrate; flower shoot short, slightly hairy, setose, aciculate; prickles slightly declining; panicle short, blunt topped; prickles longest about the middle; branches short corymbose; terminal flower, shorter than the *reflexed sepals.* Petals white distant, ovate, clawed, rounded and slightly denticulate at end. Filaments white, anthers cream, afterwards fuscous, longer than the green styles. Differs from *R. Bloxamii* in the dentition of leaves, patent prickles, absence of hairs, reflexed sepals, and is far less hairy on the panicle. Prof. Babington in 1882 suggested that it might be small *Bloxamii*, but small forms of *Bloxamii* occur in the Hartshill district; they are always more hairy plants, with thinner and more acuminate, lobate serrate leaves, never felted even in the young state. In *Bloxamiana* the young leaves are white felted, but this clothing is very deciduous. I have watched *R. Bloxamiana* in the Hartshill locality for sixteen years, and although abundant it never seems to vary in its characteristics. It only occurs so far as my own knowledge serves in the Anker basin in Warwickshire. It occurs in the basin of the Sence in Leicestershire; this river is a tributary to the Anker. In Warwickshire I find it on Ansley Coalfield, near Hartshill Hayes and near Hartshill; in each of these districts *R. Bloxamii* is abundant. It also occurs at Austrey, at a point where the counties of Leicester and Warwick meet, on both sides of the boundary line, and near Wolvey, some four or five miles south of this; in these two localities *R. Bloxamii* is absent over a large area. A somewhat similar plant was sent to me in 1884 by the Rev. R. P. Murray from Quantock above Broomfield. Mr. Murray's plant differs from the Warwickshire plant in the presence of abundant short hairs, and more abundant weaker declining prickles on the barren stem, and in the more hairy panicle, but seems to belong to *R. Bloxamiana.* *R. Bloxamiana* appears to be midway between *R. Bloxamii* and *R. scaber*, and Mr. Murray's plant appears to be a connecting link. I believe the Quantock plant was named *R. scaber* by Dr. Focke.—J. E. Bagnall. "This may be distinct, but it has very much the appearance of a less felted, or even nearly glabrous-leaved form of *R. Radula* where Purchas placed it (J. of B., xxiv., p. 102)."—C. C. Babington.

Rubus, near *Radula*, W. and N.; Baker. On the Charmouth road, in the neighbourhood of Lyme Regis, Dorsetshire, 10th July, 1889.—Charles Bailey. "There must be some mistake, I suppose, in naming this plant *Radula.* That species is always very glandular, and your Dorset plant has no glandular bristles at all. The latter agrees in many respects with *R. Questierii*, a common plant of western France, growing in the Channel Islands. The ordinary *R. Questierii* has a few glandular setæ on the rachis and whitish-felted

sepals."—Dr. W. O. Focke. "Doubtless some mistake. Does Dr. Focke mean to call this *R. Questierii?*"—C. C. Babington.

Rubus Kœhleri, W. and N.; Baker. Hedge near Borgue, Kirkcudbrightshire, 18th September, 1889.—Charles Bailey. "I am inclined to call this *R. plinthostylus*."—C. C. Babington.

R. Kœhleri, W. and N.; Baker. Near Bardon Mill, Northumberland, 17th September, 1889. New County record. Quarry, Whaley Bridge, Derbyshire, 27th July, 1889. New County record.—Charles Bailey. *R. Kœhleri pallidus*, Bab., not of W. and N."—C. C. Babington.

R. Kœhleri, W. and N.; Baker. Roadside, Gorphwysfa, in the neighbourhood of Menai Bridge, Carnarvonshire, 8th September, 1888.—Charles Bailey. Dr. Focke refers this to *R. macrothyrsos;* see note under *R. pubescens* from Dolbadarn. "I have authentic *R. macrothyrsos* before me and I think this is correctly so named. It is a beautiful plant, of which I had not previously seen British specimens."—C. C. Babington.

R. distractus, P. J. Müll., *fide* Dr. Focke. Rudyard Reservoir, N. Staffordshire, 27th August, 1887.—W. H. Painter. "I have original *R. distractus* (Ronces Vosg. 53) before me. Focke (p. 351) does not consider it to differ from the typical *R. Kœhleri*, and he is probably correct."—C. C. Babington.

R. dumetorum ferox, Weihe (under *R. diversifolius*, Lindl.) West Cliff Moor, Bournemouth, S. Hants, 1st Aug. 1889.—Coll. W. Moyle Rogers with Dr. W. O. Focke. "Differs from German type only by white petals which are rare with us"—Dr. Focke. "I do not understand the note on the ticket. What is the name that Dr. Focke gave to it? If this is *dumetorum ferox* of the 'Rub. Germ.' it is very different from Lindley's *diversifolius*. It does certainly much resemble the plate R. G. 45 B. except that it is much less strongly armed; but then I do not think it can be *horridus* of Schultz."—C. C. Babington.

R. fuscus, W. and N. Symonds Yatt, on the Wye, Gloucestershire, 31st July, 1889. I send this as a County record. I believe it to be the plant so called by Dr. Focke from stations in neighbouring counties.—W. H. Purchas. "Yes."—C. C. Babington.

R. diversifolius, Lindl. = *Roreogeton*, Focke, *teste* Dr. Focke, Bradley, S. Derbyshire, 15th July, 1887.—W. R. Linton. "Not *diversifolius*, I think. I am glad to have the *R. oreogeton* authenticated by Dr. Focke."—C. C. Babington.

R. horridus, Schultz, = *R. dumetorum*, Warren; Baker. Hedge, Masberry, in the neighbourhood of Wells, North Somersetshire, 13th July, 1889. New County record?—Charles Bailey. "Near *R. diversifolius*, Lindl."—Dr. Focke. "I agree with Dr. Focke in calling this *R. diversifolius*."—C. C. Babington.

R. festivus, M. and W.? Dinmore Woods, Herefordshire, 3rd Oct., 1889. I probably ought not to have attemped to name this plant. It was sent, from the same station, to Dr. Focke in 1885; and named by him "*mucronatus*, Blox. I think." If this is so, the range of armature in *R. mucronatus* must indeed be great. The present plant is widely spread in Herefordshire, and I have seen it in

Radnorshire.—AUGUSTIN LEY. "On what authority so-called? It does closely resemble the *R. festivus* of Wirtg. Herb. Rub. Ed. 2 (1867), quoted by Focke. It is very difficult to determine the real name of this. Several named plants approach it closely. I was inclined to call a collective species either *festivus* or *obscurifrons*, but do not see my way clearly."—C. C. Babington.

Rubus tenuiarmatus, Lees, = *R. dumetorum*, var. *concinnus*; Baker. Near Whaley Bridge railway station, Derbyshire, 27th July, 1889. New County record?—CHARLES BAILEY. "Why adopt *tenuiarmatus* as the name when there is an older, *R. Balfourianus*?"—C. C. Babington.

R. rubicundus, Wirtg. Sellack, Herefordshire, July, 1889. See Report for 1888, p. 213.—W. H. PURCHAS. "Doubtless correct. Focke places it as a form of *R. obscurus*, Kalt. Does not all our *R. Reuteri* belong here? If so, they should probably bear the name of *R obscurus*, Kalt., published in 1845, *R. rubicundus* in 1858."—C. C. Babington.

R. corylifolius, Smith; Baker. In the road between Gisburn and Long Preston, Mid-west Yorkshire, 23rd September, 1889. Hedge on the road side near Whithorn, Wigtonshire, 20th September, 1889. New County record —CHARLES BAILEY. Of the Gisburn plant Prof. Babington remarks "It is my *conjungens* which differs very slightly from *sublustris*." Of that from Whithorn he says "A little nearer to *sublustris* than the plant from Gisburn." Dr. Focke considers the Gisburn specimens "near *R. corylifolius*."

R. horridus, Schultz, = *R. dumetorum*, Warren; Baker. Hedge in field on road from Ashley to Mobberley, on the east side of the railway, Cheshire, 21st July, 1888.—CHARLES BAILEY. "I do not think it is *horridus*. I call it *R. scabrosus*."—C. C. Babington.

R. cæsius, Linn., var. Ballidon, Derbyshire, 12th Aug., 1889.—E. F. LINTON. "Is my *ulmifolius* but probably the more correct name is *R. ligerinus*, Gen."—C. C. Babington.

R. ——. Near Alton Towers, Staffordshire, 7th September, 1889.—W. H. PURCHAS. "I think it is closely allied to *R. Lintoni*, but has quinate leaves; in that the lateral leaflets are often lobed. Is the terminal leaflet entire below? I find no setæ on the stem, and scarcely any trace of felt on the leaves."—C. C. Babington.

R. obscurifrons, M. and W.; Prof. Babington. *R. septorum*, P. J. Müll., Dr. Focke. Bradley Wood, near Ashbourne, September, 1889. These specimens are from the bushes originally found by me in 1884, and from which specimens were, in 1885, submitted to Dr. Focke, who said: "*R. septorum*, P. J. Müll, or a closely-allied form." Specimens were afterwards sent to the Club by the Rev. W. R. Linton, from the same station, and were noticed in the Report for 1888. A set of this year's gathering has been sent to Prof. Babington by myself, and I received his opinion a few days ago, which is that he adheres to the name of "*obscurifrons*" which he had adopted on his previous examination of Mr. Linton's specimens. The bushes at Bradley Wood are not many, but they have increased in size from what they were when first noticed, and they have produced better developed panicles, which will give members a good idea of the plant.

When not vigorous, the leaves have a tendency to be ternate. The petals are bluish lilac. The suberect habit of the bush attracted my attention, more especially as there seems little or no other indication of affinity with the Suberecti.—W. H. PURCHAS.

Potentilla mixta, Nolte? Bradley, S. Derbyshire, 9th September, 1889.—W. R. LINTON. "Seems to be nearer *P. procumbens*, Sibth. than my idea of *P. mixta*, Nolte. *P. mixta* as I get it is a small plant having quinate stalked stem-leaves, stipules more or less trifid, petals small as in *Tormentilla*, always 4-merous, fruit slightly hispid, truly procumbent but not rooting and growing usually in barren stony places. Mr. Linton's plant is more robust and has more of the character of *P. procumbens*."—J. E. Bagnall.

Alchemilla vulgaris, Linn. var. *subsericea*, Koch. Braemar, S. Aberdeen, 20th July, 1889. Name confirmed by Mr. A. Bennett. The glabrous petioled plant was growing with this but was less frequent.—W. R. LINTON.

Rosa hibernica, Sm., var. *glabra*, Baker. Hedge bank, near Belfast, 10th June, 1881.—S. A. STEWART. The Rev. E. F. Linton points out that this is not var. *glabra*, but the type, having the leaflets hairy on the nerves and the petiole pubescent, whereas the var. *glabra* is quite glabrous.—J. G.

R. mollis, Sm. Ape's Tor, near Alstonfield, Staffordshire, 2nd Sept., 1889.—W. H. PURCHAS. Bush in the cross road between Borgue and Girthon Kirk, Kirkcudbrightshire, 18th Sept., 1889. A very common rose in the southern part of this county.—CHARLES BAILEY. Confirmed by Mr. Baker.

R. mollis, Sm., var. *cærulea*, Woods. Ape's Tor, near Alstonfield, Staffordshire, 2nd Sept., 1889.—W. H. PURCHAS. "Yes."—J. G. Baker.

R. mollis, Sm. form. Brailsford, S. Derbyshire, 17th June and 9th Aug., 1889. Noticeable for its white flowers, somewhat dense aciculation of stem and fruit, and slender habit.—W. R. LINTON. Passed by Mr. Baker without comment.

R tomentosa, Sm. var. Mountain side, Allt-goch, Radnorshire, 11th July, 1889.—AUGUSTIN LEY. "Undistinguishable from *mollis* by specimen."—J. G. Baker.

R. tomentosa, Sm. form. Ape's Tor, near Alstonfield, Staffordshire, Sept., 1889.—W. H. PURCHAS. "*Subglobosa*."—J. G. Baker.

R. tomentosa, Smith, var. *subglobosa*, Smith; Baker. Bush on the roadside between Borgue and Girthon Kirk, Kirkcudbrightshire, 18th September, 1889. New County record. Roadside near Newton Stewart, on the Wigtonshire side of the River Cree, 21st September, 1889. New County record. In the underwood of Firestone Copse, between Haven Street and Wootton Bridge, near Ryde, Isle of Wight, 4th October, 1888.—CHARLES BAILEY.

R. rubiginosa, Linn.; Baker. Bush on the hill, below the Rutherford obelisk, Gatehouse of Fleet, Kirkcudbrightshire, 19th September, 1889. Growing in the midst of native roses and brambles.—CHARLES BAILEY.

R. lutetiana, Leman; Baker. Bush overhanging a brook in the

neighbourhood of Worston, near Chatburn, South Lancashire, 23rd September, 1889. Mountain side, above Llys-y-Gwynt, in the neighbourhood of Llanfairfechan, Carnarvonshire, 7th July, 1888. Hedge on the outskirts of Firestone Copse, between Haven Street and Wootton Bridge, near Ryde, Isle of Wight, 4th October, 1888. Among bushes in a field near Golden Hill Fort, Freshwater, Isle of Wight, 11th October, 1888.—CHARLES BAILEY. The Llys-y-Gwynt plant has setose peduncles and doubly serrate leaflets so would I suppose come down to var. *verticillacantha*, Baker. = *R. inconspicua*, Déségl. That from Golden Hill Fort has the midrib hairy.—J. G.

Rosa sphærica, Gren.; Baker. Hedge in lane near Gisburn railway station, Mid-west Yorkshire, 23rd September, 1889. Bush on the hill below the Rutherford obelisk, near the cottages, Gatehouse of Fleet, Kirkcudbrightshire, 19th September, 1889. New County record.—CHARLES BAILEY. The Gisburn plant appears to be an *urbica* form.—J. G.

R. senticosa, Ach.; Baker. Bushes in a field in the neighbourhood of Golden Hill Fort, Freshwater, Isle of Wight, 11th October, 1888. New County record.—CHARLES BAILEY.

R. canina, Linn., var. *senticosa* (Ach). Atlow, S. Derbyshire, 11th September, 1889.—W. R. LINTON. "Yes."—J. G. Baker.

R. canina, Linn., var. *collina* (Jacq.) f. *biserrata*. Bradley, S. Derbyshire, 31st August, 1887.—W. R. LINTON. "I should not call this *collina*. It is *dumalis* with a bristle or two on pedicel."—J. G. Baker.

R. verticillacantha, Mérat, var. *aspernata* (Déségl). Pinley Green, Warwickshire, July and August, 1889.—J. E. BAGNALL.

R. canina, Linn., var. *decipiens* (Dum.), form. Brailsford, S. Derbyshire, June and August, 1889. Noticeable points are the dark foliage, the sharp serration and deciduous pubescence of the leaflets, and the character of the fruit. In 1888 fruit was not produced, and only sparingly this year; can it be a hybrid?—W. R. LINTON. "*Collina*, *Kosinciana*, not *decipiens*."—J. G. Baker.

R. canina, Linn., var. *glauca* (Vill). Hulland, S. Derbyshire, 14th September, 1889. The petioles are glandular and pubescent, the leaflets in the main singly serrate. A little approaching the var. *subcristata*, Baker, which occurred one mile from where this plant grew.—W. R. LINTON. "=*Reuteri*."—J. G. Baker.

R. Reuteri, Godet; Baker. Hill side, Whaley Bridge, Derbyshire, 27th July, 1889. New County record. Hedge in lane, in the neighbourhood of Chatburn Railway Station, South Lancashire, 23rd September, 1889. New County record.—CHARLES BAILEY.

R. subcristata, Baker; Baker. Hedge in lane, and field hedge in lane, between Gisburn and Long Preston, Mid-west York, 23rd September, 1889. New County record? Hedge on the roadside between Cauldside and Glasserton House, near Whithorn, Wigtonshire, 20th September, 1889, New County record. Bush on the hill below the Rutherford obelisk, Gatehouse of Fleet, Kirkcudbrightshire, 19th September, 1889. New County record. CHARLES BAILEY. The Whithorn plant has the leaflets hairy on their under surface.—J. G.

Rosa canina, Linn., var. *implexa* (Gren.). Shirley, S. Derbyshire, 3rd August, 1889. "Too young to be sure whether really sect. *Subcristatæ*."—J. G. Baker.

R. coriifolia, Fries, var. *Lintoni*, N. J. Scheutz. Braemar, Aberdeen, 27th July, 1889. We send specimens of this rose, which was named by Dr. Scheutz, and described by him in the *Journal of Botany* (Vol. xxvi., p. 67).—E. F. & W. R. Linton.

R. coriifolia, Fr. var. Bradley, S. Derbyshire, 19th August, 1889. Named *coriifolia* by Mr. J. G. Baker in 1888, but differs from the type by its setose sepals, and occasionally aciculate peduncles.—W. R. Linton.

R. Watsoni, Baker. Bush on the hill near the Rutherford obelisk, Gatehouse of Fleet, Kirkcudbrightshire, 19th September, 1889. New County record.—Charles Bailey.

R. canina, Linn. var. *Watsoni*, Baker. Bradley, S. Derbyshire, 9th September, 1889. This rose was referred to *Watsoni* by Mr. J. G. Baker, and to *coriifolia* by M. Crépin in 1888. See Report for 1888, p. 215. My own strong opinion is that we have here not *R. canina* but a form of *R. tomentosa*, Sm.—W. R. Linton.

R canina, Linn., var. Bradley to Kniveton, S. Derbyshire, 7th August, 1889. Twigs wine-red, leaflets rounded at the base, sepals inclined to ascend.—W. R. Linton. On this and the following plant Mr. Baker remarks:—"Too young to be sure if sect. *Subcristatæ*."

R. canina, Linn., var. Shirley, S. Derbyshire, 31st August, 1889. This plant might at first sight be mistaken for *R. glauca*, Vill., which grows two fields away, and is specifically distinct and to be ranked not under but coordinate with *canina*. I should place this plant in a *subcristate* section of the *lutetiana* group.—W. R. Linton.

R. arvensis, Huds., var. Atlow, S. Derbyshire, 11th September, 1889. Bush weak and trailing, few flowered; leaflets deeply cut and serrate; fruit rather small and oblong.—W. R. Linton. "*R. arvensis*."—J. G. Baker.

R. arvensis, Huds., var. *gallicoides* (Déségl). Near Ashbourne, Derbyshire, 21st September, 1889. W. R. Linton. "I suppose *gallicoides* is a hybrid. This is much nearer *arvensis* than Bromwich's plant."—J. G. Baker.

R. arvensis, Huds., var. *bibracteata* (Bast.)? Bradley, S. Derbyshire, 17th August, 1889. Bush robust and luxuriant. If correct this is a new County record.—W. R. Linton. "Doubtful if *bibracteata*."—J. G. Baker.

R. arvensis, Huds., var. *reptans* Crép. Hollington, S. Derbyshire, 12th October, 1889. A similar plant was so named by M. Crépin in the 1887 Report.—W. R. Linton. "I should call this simply *arvensis*."—J. G. Baker.

R. arvensis, Huds., var. Chesterton Wood, Warwickshire, July, 1889.—H. Bromwich. "Yes."—J. G. Baker.

Saxifraga hirsuta, Linn. Root from Brandon Mountain, Kerry, cult., Sellack, Herefordshire, 1st June, 1889.—Augustin Ley. "*Hirsuta* is merely a *Geum* variety."—J. G. Baker.

Saxifraga decipiens, Ehrh. var. *grœnlandica*. Brandon Mountain, Kerry, 3rd August, 1885.—W. R. Linton. "A *decipiens* form, scarcely arctic *grœnlandica*."—J. G. Baker.

Ribes rubrum, Linn. var. *sylvestre?* Braemar, Aberdeenshire, 29th July, 1889. Sent up under the above name from the same locality in 1883, and published in the Report for that year without comment. E. F. and W. R. Linton. "I believe typical *R. rubrum*, I have not seen it indigenous at Braemar."—C. C. Babington.

Epilobium. Prof. Haussknecht has kindly examined the plants of this genus contributed to the Club, and except where otherwise stated confirms the names under which they are sent.

E. parviflorum × *obscurum*. Brailsford Brook and Bradley, S. Derbyshire, August, 1889.—W. R. Linton.

E. montanum × *obscurum*. Bradley Wood and Edlaston, S. Derbyshire, July, 1889 —W. R. Linton. Railway bank, Rhayader, Radnorshire, 10th July, 1889.—Augustin Ley. Prof. Haussknecht considers Mr. Ley's plant *E. montanum*.

E. roseum × *montanum*. Laneside, Cobrey, Ross, Herefordshire, 26th July, 1889.—Augustin Ley. "*E. roseum*." Prof. Haussknecht.

E. obscurum, Schreb. var. Moffat, Dumfriesshire, 31st July, 1889. Growing by the roadside much intermixed with *E. palustre*.—W. R. Linton." *Ep. obscurum, forma annua simplex*."—Prof. Haussknecht.

E. obscurum × *tetragonum*. Wood-banks, Dinmore, Herefordshire, 3rd October, 1889.—Augustin Ley.

E. Lamyi, Wirtg. Great Doward, Herefordshire. Cult. 16th July and 9th September, 1889.—Augustin Ley.

E. palustre, Linn., var. *lineare*, Krause? Clova, Forfar; and Moffat, Dumfries, July, 1889.—W. R. Linton. "*E. palustre* v. *lineare* Kr. *p.p.* gemischt mit f. *simplex*." Prof. Haussknecht.

Circœa alpina, Linn., var. *intermedia*. Aberedw, Radnorshire, 10th July, 1889.—Augustin Ley. I should say *C. alpina* type.—J.G.

Æthusa Cynapium, Linn., var. *pygmœa*, Koch, = var. *segetalis* (Bœnngh.). Marston, Oxon, September, 1889.—G. Claridge Druce. "Doubtless, but only a dwarfed form." C. C. Babington.

Lonicera Xylosteum, Linn. In a coppice and old hedges to the east of Houghton Bridge, West Sussex, August, 1889.—F. J. Hanbury and W. W. Reeves. Mr. Reeves writes "That the plant is wild in this part of Sussex, I have no doubt; it grows in some quantity in coppices, and also in some of the old hedges on the side of the downs to the east of Houghton Bridge about four miles from Arundel. These small woods are persistently cut down and the hedges trimmed, a circumstance which makes it very difficult to obtain specimens in flower. We were about right for ripe fruit, but were only fortunate enough to find two specimens in that state after looking over some dozens of bushes."

Galium Mollugo × *verum*. Hedge-bank, near Bagley Wood, Berks, Sept. 1889, growing with *G. verum* and *G. Mollugo*.—G. Claridge Druce.

Carduus nutans × *arvensis?* Railway cutting, King's Capel, Herefordshire, 9th July, 1889. One enormous plant with some 100 heads of blossom.—AUGUSTIN LEY. "Curious, may be so."—C. C. Babington.

Crepis nicæensis, Balb. Yeldersley, S. Derbyshire, June. 1889. Agreed to by Mr. A. Bennett. Specimens sent as vouchers for record.—W. R. LINTON.

Hieracium. Mr. Hanbury has very kindly looked through the whole of the specimens of this genus, a precaution particularly necessary in the case of the Hawkweeds, as, no doubt owing to the roots so often occurring singly, they are especially liable to be mixed by collectors.

H. eximium, Backh., var. *tenellum*, Backh., Beinn Muich Dhui, and Little Craigindal, S. Aberdeen, July, 1889.—W. R. LINTON. "These are all correct."—F. J. Hanbury.

H. calenduliflorum, Backh. Dhuloch, So. Aberdeen, 24th July, 1889.—W. R. LINTON. "Typical."—F. J. Hanbury.

H. globosum, Backh. Beinn Muich Dhui, So. Aberdeen, 22nd July, 1889.—W. R. LINTON.

H. nigrescens, Willd., forma *monocephala.* Cultivated at Shirley, Derby, 1889. This plant, brought from Ben Hope, Sutherland, in 1886, remains monocephalous after three seasons' cultivation in rich soil; in two flowering stems only was a branch produced from low down.—W. R. LINTON. "I believe this interesting form to be correctly named."—F. J. Hanbury.

H. lingulatum, Backh. Clova and Braemar, July, 1889.—E. F. and W. R. LINTON.

H. anglicum, Fr. var. *longibracteatum*, Hanb. Bettyhill, Sutherland, July, 1888.—E. F. and W. R. LINTON. Isle of Skye, August, 1884.—W. R. LINTON. "All correct."—F. J. Hanbury.

H. anglicum, var. *acutifolium*, Backh. Braemar, So. Aberdeen, end of July, 1889.—W. R. LINTON.

H. pallidum, Biv. Limestone rocks, Gt. Doward, Herefordshire, 7th June, 1879.—AUGUSTIN LEY. "Certainly the plant we have hitherto been accustomed to call *H. pallidum*, Biv."—F. J. Hanbury.

H. Schmidtii, Tausch. Bergs of Skelberry, Northmaven, Shetland, 11th July, 1889. To confirm new County record.—W. H. BEEBY. "Yes."—F. J. Hanbury.

H. argenteum, Fr. Armadale, Sutherland, 27th July, 1888.—E. F. LINTON. "All correctly named."—F. J. Hanbury. Clova, Forfar, July, 1889.—W. R. LINTON. "Correctly named and fine specimens."—F. J. Hanbury.

H. aggregatum, Backh. Little Craigindal, So. Aberdeen, 1889 — W. R. LINTON. "Correct."—F. J. Hanbury.

H. "*pallidum*," Bosw., or "*H. cæsium*," Baker. Styles dusky. Dovedale, Derby, June, 1889. Sent for comparison.—W. H. PURCHAS. "Not typical *H. cæsium*, Fr., though probably a form of, or nearly allied to, that species. I have already sent some of this to Scandinavia for further opinion on it."—F. J. Hanbury.

H. vulgatum, Fr., var. Chee Tor, near Wormhill, Derby, 8th

July, 1887.—AUGUSTIN LEY. "These I believe to be *H. diaphanoides*, Lindeb."—F. J. Hanbury.

Hieracium vulgatum, Fr., var. Limestone Rocks, Ashwood Dale, Derby, 8th July, 1887.—AUGUSTIN LEY. "I am not prepared, at once, to give an opinion on the six top sheets [No. 1] which seem to materially differ from those below [No. 2] which are undoubtedly a form of *H. vulgatum*, Fr."—F. J. Hanbury.

H. gothicum, Fr. var. Uig, Isle of Skye, 9th August, 1888.—W. R. LINTON. "I believe this to be a dwarf form of *H. auratum*, Fr."—F. J. Hanbury.

H. gothicum, Fr. Clova, Forfar, 1889.—E. F. & W. R. LINTON. "Yes; fine and well marked."—F. J. Hanbury.

H. strictum, Fr. Moffat, Dumfries, 31st July, 1889.—W. R. LINTON. "I cannot speak with any confidence about these plants. They are immature, bear no note of styles and differ considerably in general appearance from the typical plant as found in Sutherland, Orkney, &c."—F. J. Hanbury.

H. diaphanoides, Lindeb. Near Settle, Yorks, 6th July, 1888.—R. F. & F. P. THOMPSON. "Yes, I believe."—F. J. Hanbury. Beresford Lane, Alstonfield, N. Staffs., 7th August, 1889.—W. H. PURCHAS. "I believe these to be correctly named, though the leaves are broader in some of the specimens, than in those I have hitherto seen."—F. J. Hanbury.

H. farrense, F. J. Hanb. Bettyhill, Sutherland, 30th July, 1888.—W. R. LINTON. "Yes."—F. J. Hanbury.

H. oreades, Fr. East coast of Caithness, 20th July, 1888.—W. R. LINTON. "Yes."—F. J. Hanbury.

H. Langwellense, F. J. Hanb. East coast of Caithness, July, 1888.—W. R. LINTON. "The specimens are poor."—F. J. Hanbury.

H. bifidum, Tausch. Cliffs of Carnedd Daffydd, Carnarvonshire, 16th August, 1886.—AUGUSTIN LEY. "Correctly named, I believe."—F. J. Hanbury.

H. scoticum, F. J. Hanb. Sandside Burn, Reay, Caithness, 22nd July, 1889.—W. F. MILLER. Comm.—ARTHUR BENNETT. "Yes."—F. J. Hanbury.

H. proximum, Hanb. Reay, Caithness, 26th July, 1888.—W. R. LINTON. From same locality, July, 1889.—W. F. MILLER. Comm.—ARTHUR BENNETT. "Yes."—F. J. Hanbury.

H. caledonicum, Hanb. Uig, Skye, August, 1888.—W. R. LINTON. "I believe these plants to be correctly placed under this name, although many of the specimens differ somewhat in general appearance from the plant so abundant on the sandy cliffs at Melvich, where I first gathered it."—F. J. Hanbury.

H. auratum, Fr. Isault Burn, Caithness, 22nd July, 1889.—W. F. MILLER. Comm.—ARTHUR BENNETT. "Yes."—F. J. Hanbury. Braemar, Aberdeen, July, 1889. This and *H. crocatum*, Fr., were remarkably fine and abundant about Braemar last summer, helping to beautify the banks of the Dee and the Clunie at several points. What we formerly gathered in this district as *H. corymbosum* is all *H. auratum*, which is proving to be a very generally distributed

hawkweed in Scotland. We saw a specimen at Moffat, on our way south, gathered by Mr. T. Johnstone, in Dumfriesshire. We collected it too at Clova, both in 1887 and 1889.—E. F. & W. R. Linton. Dunbeath, E. coast of Caithness, 25th July, 1888.—E. F. Linton. "Yes, the form from Dunbeath, with deeply toothed leaves is identical with that found to the west of Reay Bay, on the north coast of Caithness."—F. J. Hanbury. Reay, Caithness, and Bettyhill, Sutherland, August, 1886.—E. F. & W. R Linton. "Yes."—F. J. Hanbury.

Hieracium salicifolium, Lindb. Craig Dulyn, Carnarvon, 30th August, 1887.—A. Ley. "I sent specimens of this plant bearing the same date and label to Dr. Lindeberg, who thus named it. See 'Journ. Bot.,' 1889, p. 74."—F. J. Hanbury.

H. ——. Styles dusky. Rocky banks in the Wetton Valley, N. Staffs., 10th June, 1889. A form which I have had under notice for several seasons, and which differs from the glaucous *Hieracium* of Dovedale and other limestone dales of Derbyshire in the thicker, more oblong and more entire leaves, in the shorter and thicker form of the unopened heads, and the shorter phyllaries. The upper surface of the leaf also differs. I add a few examples of the Derbyshire plant for comparison; the styles in both are dusky.—W. H. Purchas. "*H. murorum* form."—F. J. Hanbury.

H. ——. Low sandstone cliffs, New Brighton, Cheshire, 19th June, 1889.—W. H. Purchas. "I am not prepared to give an immediate opinion on this interesting plant. It would appear to be nearly allied to, if not a form of, *H. vulgatum*, Fr."—F. J. Hanbury.

Leontodon hastilus, Linn. Grass-field, near Corsham, North Wilts., with *L. hispidus* in plenty, 6th September, 1889.—W. Moyle Rogers. "A plant I know little about, but apparently this may be it."—C. C. Babington.

Sonchus arvensis, Linn., var. *angustifolia*, Meyer. Wells, Norfolk, September, 1889. Collected by F. Long, contributed by H. D. Geldart. "I presume it is."—C. C. Babington.

Jasione montana, Linn., var. *littoralis*, Fries. In great plenty, East Cliff, Bournemouth, S. Hants., 12th July, 1889. Flowers usually of a pale slaty colour. For description see Townsend's "Flora of Hampshire," p. 202. Slight as this variety is I send a few sheets on the chance of some of the members wishing to have it.—W. Moyle Rogers.

Campanula glomerata, Linn., var. *nana*, C. Bailey. Abundant in the short turf of Afton Down, and High Down, near Freshwater; and the Down over the Needles and Alum Bay; Isle of Wight, 9th, 10th, and 12th October, 1888. Only the diminutive size of all its parts, and its few flowers, distinguish it from the type; we have nothing like it in Derbyshire and the north of England. It bears the same relation to the type which Koch's *Erythræa capitata* bears to *E. Centaurium*, Pers., and, like that plant, is probably the effect of exposure to the sea-breeze on the wind-swept stations in which both plants occur.—Charles Bailey.

Erythræa capitata, Willd., var. *sphærocephala*, Towns. Afton Downs, Isle of Wight, 2nd July, 1889.—J. H. A. Steuart.

Gentiana Amarella, Linn., var. *præcox*, Raf. Near Durlstone Head, Dorset, 25th May, 1889.—E. F. Linton. Ventnor, and Bembridge Downs, Isle of Wight, June, 1889.—J. H. A. Steuart.

Symphytum tuberosum, Linn. Established in abundance on a railway embankment, near Montpellier Station, West Gloucestershire, 6th June, 1889.—J. W. White.

Anchusa sempervirens, Linn. Base of wall, in the neighbourhood of Borgue, Kirkcudbright, 18th September, 1889.—Charles Bailey.

Myosotis collina, Hoffm., var. *Mittenii*, L. C.? Braemar, S. Aberdeen, 27th July, 1889. Growing as a weed by a cottage. W. R. Linton. "I have no description of v. *Mittenii*, only the note in 'Student's Flora,' p. 282. I presume that this is it."—C. C. Babington.

Euphrasia officinalis, Linn., form tending towards *E. Salisburgensis*, Funk? Ape's Tor, near Alstonfield, Staffs., September, 1889.—W. H. Purchas. Mr. Townsend writes:—"As regards this I would say 'confer *Euphrasia nemorosa*, H. Mart.' It does not really approach *E. Salisburgensis* except, at a superficial glance, by its bracts which are somewhat contracted or narrowed above, and by the setaceous teeth of the same. The bracts, however, have the prominent nerves on the lower surface which is characteristic of *E. nemorosa* and its allies, and they have the broad base of the same and the numerous teeth. The nerves of the bracts (and leaves) of *E. Salisburgensis* are not raised, the teeth are few and the base of the bracts is cuneate."

E. officinalis, Linn., var. Old Storridge, near Malvern, Worcestershire, 23rd September, 1889. A very slender and flexuous variety, with unusually drawn-out stem and branches, occurring in considerable quantity at this station, and not appearing to pass into the more frequent rigid form of the plant.—R. F. Towndrow. "Not an uncommon form of *Euphrasia nemorosa*, H. Mart."—F. Townsend.

Rhinanthus Crista-galli, Linn., var., *Drummond-Hayi*, White. Clova, Forfar, 15th July, 1889.—E. F. and W. R. Linton. "Right; the variety is easily recognised by the calyx being minutely pubescent all over and not merely on the edges. It seems to be essentially a mountain form and there is often (if not always) a gap between the altitudinal distribution of the type and of the variety. The latter—first found on Ben Lawers—has now been seen on many hills."—F. Buchanan White.

Mentha Nicholsoniana, Str. River bank, Whitney, Herefordshire, 13th Sept., 1889.—Augustin Ley. "*M. sylvestris*, var."—J. G. Baker.

M. viridis, Linn., Shirley, S. Derbyshire, 30th Aug., 1887. Sent to confirm record as a casual.—W. R. Linton.

M. Piperita, Huds. var. *officinalis*, Hull. Shallow burn in the neighbourhood of Borgue, S. Kirkcudbrightshire, 18th Sept. 1889.—Charles Bailey. I took this for a form of *M. hirsuta*, but Mr. Baker confirms Mr. Bailey's naming.—J. G.

M. arvensis × *sativa*? Shirley, S. Derbyshire, 9th Sept., 1887. This plant has the leaf serrations of *arvensis*, but the calyx-segments of *sativa*, and seems to be an intermediate form, though nearer to

arvensis of the two species. It was growing in a splash.—W. R. Linton. "Seems an intermediate between the two."—J. G. Baker.

Mentha arvensis, Linn., var. Yeldersley, S. Derbyshire, 9th Sept., 1889. The same as the plant of 3rd September, 1887, commented on in the Report of that year. One of the water forms of this species which so far appears to have escaped naming.—Wm. R. Linton.

Salvia verticillata, Linn. On waste ground near Kingswood, West Gloucestershire, 18th September, 1889. Established many years.—J. W. White.

Stachys ambigua, Sm. = *sylvatica* × *palustris*. Damp, shady, roadside bank, near Belfast, Co. Antrim, 25th August. 1889.—S. A. Stewart.

S. annua, Linn. Waste ground near Kingswood, West Gloucestershire, 18th September, 1889. Established many years.—J. W. White.

Plantago arenaria, Linn. Formerly found on coast of N. Somerset, and at Kingswood, West Gloucestershire. Now cultivated in University College garden, Bristol, 28th September, 1889.—J. W. White.

Chenopodium murale, L. Growing on a heap of rubbish near Port Meadow, and also by the canal side at Oxford, September, 1889. The record in 'Top. Bot.,' *i.e.*, Bees. Cat. was probably an error, as Mr. T. Beesley says, "I doubt this." It was collected in Oxford in 1867 on ground near Hythe Bridge street (now built over) by Mr. H. Boswell. It certainly has not been noticed about Oxford since 1879 till this year, when many hundreds of plants occurred in the above localities.—G. Claridge Druce.

Polygonum Persicaria, Linn., var. *elatum*, Gr. and Godr. Riverbank, Ross, Herefordshire, 28th September, 1889.—Augustin Ley. "I think it is, but I have called it *biforme*."—C. C. Babington.

P. arifolium (L) This curious prickly Polygonum, kindly named for me by Mr. Arthur Bennett, was growing abundantly on the stony bed of a small stream at Castle Cove on the Kenmare River or Bay, about six miles east of Darrynane. It grew just above tidal influence, and a little below a pool that seemed to be used for washing clothes by a few cottagers in the neighbourhood. Mr. Bennett tells me that this "halberd leaved Tear-thumb" is a native of low grounds in Canada and United States. I find it hard to account for its presence here, more especially as my investigations were cut short by a drenching thunder-storm, under which I had to make the best of my way to Darrynane, 12th July, 1889.—R. W. Scully.

Rumex scutatus, Linn. Near Sawley, M. W. Yorks, 23rd July, 1889.—R. F. & F. P. Thompson. Root from Feizor, Yorks, cult., Knypersley, August, 1889.—W. H. Painter.

R. crispus × *viridis*. Madresfield, Malvern, Worcestershire, 11th July, 1889.—R. F. Towndrow.

Urtica dioica, L., var. *holosericea*, Fries. Stoke-by-Nayland, Suffolk, 12th September, 1889. This was pointed out to me by the Rev. J. D. Gray as being probably var. *angustifolia*, Blytt. Mr. Arthur Bennett, on seeing specimens, wrote to me as follows:—"I think this is rather b. *holosericea*, Fries, Nov. Fl. Suec. ed. 2 p. 281.

Blytt gives "b. *holosericea*, Hartm." with a ? under *angustifolia;* Hartmann says "*holosericea*, Fries;" so they probably mean the same plant. Your specimen seems to me to hold a sort of middle place between b. *microphylla*, Haussmann, and Fries' plant; but nearer the latter."—E. F. Linton.

Urtica dioica, Linn., var. *microphylla*, Hauss. Stone-work by canal side, Oxford, September, 1889. See Report for 1888, p. 231.—G. Claridge Druce.

Salix viridis, Fr. ♂ Malvern Link, Worcestershire, May and August, 1889.—R. F. Towndrow. "A good intermediate condition."—F Buchanan White.

S. viridis, Fr. ♀ Malvern Link, Worcestershire, May and August, 1889.—R. F. Towndrow. "Another form nearly intermediate, but leaning a little towards *S. fragilis*."—F. Buchanan White.

S. undulata, Ehrh. *teste* Dr. F. Buchanan White. Osier bed, the Serpentine, Biddulph, N. Staffs., May and September, 1889.—W. H. Painter.

S. ——. From an apparently very old tree, overhanging a pond, at Sapcote, Leicestershire. A hard winter has since killed it. August, 1887.—Elizabeth Lomax. "*S. purpurea*, L. f. *styligera*, Wimm. It differs from the type only in the subacute ovaries with the stigmas seated on short styles, instead of being sessile. These specimens agree with Austrian examples so named."—F. Buchanan White.

S. purpurea, Linn. var. *Lambertiana*, Sm. Berrow, North Somerset, April and August, 1888.—J. W. White. "*S. rubra*, Huds. Under Hudson's name all the forms assumed by the hybrid between *S. purpurea* and *S. viminalis* must be included. This form is *S. Forbyana*, Sm., and from its greater affinity with *S. purpurea* than with *S. viminalis* is called *purpureoides* by Grenier and Godron. The *purpurea*-like states of the hybrid seem to be much rarer than the more intermediate condition, and are not infrequently mistaken for varieties of *S. purpurea*."—F. Buchanan White.

S. Smithiana, Willd. (*S. rugosa*, Leefe.) The Serpentine, Biddulph, N. Staffs., May and Sept., 1889.—W. H. Painter. "May be best placed under *S. Smithiana*, W., b. *sericans*, (Tausch) though it is a little aberrant. *S. rugosa*, Leefe, is on the whole nearer c. *velutina*, (Schrad.), but various forms of *Smithiana* have been called *S. rugosa*."—F. Buchanan White.

S. cinerea L., f. *androgyna*, and f. *gynandra*. Holme Fen, Hunts, 14th May, 1888. I send further specimens of this gathering of these two curious forms, as Dr. White threw doubt on the *species*, when the Rev. W. R. Linton sent specimens (from the same two bushes) a year ago (Report, p. 232.) I am at a loss to understand how the referee failed to recognize such obvious *S. cinerea;* the specimens represent a typical form of the plant. Mature leaves can scarcely be required to settle the *species*. The specimens were sent to illustrate a curious development of the flower, possibly a reversion to an earlier condition of existence; and the words *androgyna* and *gynandra* are not names, but descriptive terms, employed very appropriately by our continental *confrères* to denote (1) staminate

plants that go off into pistillate, and (2) pistillate plants that go off into staminate.—E. F. Linton. "Specimens imperfect since there are no adult leaves. Hence the species cannot be determined with absolute certainty, though it is probably *S. cinerea*. Monstrosities seem to be more frequent in that species than in other willows."—F. Buchanan White.

Salix aurita, Linn. Androgynous forms. Bradley and Yeldersley, S. Derbyshire, May and August, 1889.—W. R. Linton. "Monstrous states of *S. aurita*."—F. Buchanan White.

S. phylicifolia, L., var. *Croweana*, Sm. Cultivated at Sprowston, Norfolk, 10th May and 28th September, 1887. In the 1887 Report Dr. F. B. White asserted that this was not *S. Croweana*, Sm. (see p. 190); and went on to state that "the varieties of *S. phylicifolia* and of *S. nigricans* are of no value, and should be dropped from our list." Does Dr. White know *S. Croweana*, Sm.? I am of opinion that what I sent in 1887, and what I am now sending (the one gathering) *is S. Croweana*, Sm. Not only did my cuttings come from a source where all care was taken against error in transmitting a name, but my two shrubs, and the specimens taken from them, agree in every particular with the copious description Smith gives of this willow. The connation of the stamens, to which Dr. White refers, is irregular in my specimens; some stamens I have found connate to above the middle, *i.e.*, more than half; more frequently they are connate only at or near the base. Smith says the filaments are "capillary, partially combined, or monadelphous, sometimes at the bottom only, sometimes for half or three-fourths of their length, occasionally unequal." Thus the specimens fit the description. I think it is probable that some of the vars. of *S. phylicifolia* and of *S. nigricans* may prove to be hybrids; but they would not therefore be "of no value," because their hybrid origin was ascertained. *S. Croweana*, Sm, I at present regard as a variety, not a hybrid; and I send a further supply of my specimens, in order to correct what appears to me to have been a mistake in the 1887 Report.—E. F. Linton. "I have not been fortunate enough to be able to find connate filaments in the specimens submitted to me, but since Mr. Linton has had the advantage of having been able to examine living catkins, I am prepared to admit that connation may sometimes occur. The only character of any importance in *S. Croweana*, Sm. lies in the combined filaments, and this combination seems clearly to be as Borrer thought probably "but an accidental monstrosity in that individual from which all the plants, which he has examined, have originated." Forbes (Sal. Wob. t. 52) figures and describes a further development of this abnormal condition. He observed the progressive change of the monadelphous stamens into ovaries with style and stigma perfect. Wimmer describes similar monstrosities in plants of *S. phylicifolia* in the Berlin Botanical Garden. The "*Croweana*" specimens (Smith's, Ward's, Leefe's, Borrer's, &c.) examined by me are rather a heteromorphous lot, and do not agree in their characters. The majority are evidently monstrosities of *S. phylicifolia*, but I

have seen one or two specimens – without adult leaves, and perhaps not of British origin—which *may* be *S. phylicifolia* × *S. purpurea.* Combined filaments in *S. phylicifolia* are not, however, confined to "*Croweana.*" Such occur in some specimens named by Borrer "*Weigeliana*" and considered by him to be a monstrous condition. Some other specimens of "*Weigeliana*" are gynandrous. Borrer, while thinking that the combined filaments of "*Croweana*" were only accidental, seems to have upheld *Croweana*—as well as some of the other supposed species manufactured out of *S. phylicifolia*—on the ground of its leaf-characters. Most of these "species" appear to have been founded on individual bushes, but, even when not so restricted, their characters are neither sufficiently constant nor distinct enough to merit their retention even as varieties. Whilst 'forms' or 'conditions' are innumerable in willows, my experience is that true varieties (*i.e.* states distinguished by well-defined and constant characters) are not of common occurrence. Hybrids on the other hand cannot be classed as, thou[illegible]ley may be mistaken for, varieties. A few—but only few—of the *phylicifolia* and *nigricans* "varieties" seem to be really hybrids. Amongst these "*Croweana*" has no place, nor can it be regarded as a true variety."—F. Buchanan White.

Salix lapponum, Linn., var. *arenaria* (L. ex. p). Clova Mountains, Forfar, 12th July, 1889.—W. R. Linton. "There are no characters of sufficient importance or constancy by which British *S. lapponum* can be divided into forms and much less into varieties. An exception must be made in the case of *S. glauca*, Sm. (*non* L.) which is the same as *S. helvetica*, Vill.—a variety or sub-species of *S. lapponum.* This must not be confounded with the 'var. *pseudo-glauca*,' of recent lists which has no important characters. *S. helvetica* has apparently not been found in Britain for many years, but I have seen a specimen collected (if the label is correct) on Ben Lawers by Winch and named '*Salix glauca.*'"—F. Buchanan White.

Orchis Simia, Lamk. Chalky ground, Oxfordshire. More frequent this year and spreading, it is to be hoped, to a less exposed situation. *O. militaris* did not appear this season, but a new locality was discovered for it in Bucks, or rather an old locality verified. These specimens have been dipped in sulphurous acid and methylated spirit in the hope of preserving their colour. It has rather deepened the tint May, 1889.—G. Claridge Druce. A valuable contribution. Mr. Druce is to be congratulated upon his success in retaining the colour of the flowers.—J. G.

Simethis bicolor, Kunth. Abbey Island, Darrynane, Kerry, 9th July, 1889. I am afraid that most of the specimens sent are not satisfactory examples of the usual Kerry state of this plant. My visit to Darrynane was late by several weeks to gather the *Simethis* at its best. Growing in the cracks about rocky knolls, the leaves of this plant sometimes attained eighteen inches in height and a third of an inch in breadth, but two or three weeks of hot weather had brought the plant to a light brown, and nearly all the capsules were shed. The only place I could find the *Simethis* not too advanced to gather,

was on an exposed slope of the Abbey Island, open to the Atlantic. It grew here pushing its way through a prostrate growth of *Ulex* and heaths, above this the leaves were twisted into every shape, and often cut off, apparently eaten by sheep or goats. I was glad to find this rare plant had a much wider range in Kerry than was supposed. A specimen of the Bournemouth *Simethis*, kindly sent me by the Rev. E. F. Linton, seems a much more slender and delicate plant than the usual Kerry state.—R. W. Scully.

Allium vineale, Linn., var. *capsuliferum*, Syme. Rock, Wetton Mill, N. Staffordshire, September, 1889.—W H. Purchas. The var. *bulbiferum ;* var. *capsuliferum* has no head-bulbules.—J. G.

Juncus tenuis, Willd. By old road, between Sneem and Caherdanick, Kerry, 12th July, 1889.—R. W. Scully. See *Journal of Botany*, vol. 27 (1889), p. 335.

Alisma ranunculoides, Linn., a form? Border of Maelog Lake, Anglesey, June, 1889.—J. E. Griffith. A weak form closely resembling *A. repens*, but I do not see any trace of the rooting character.—J. G.

Potamogeton natans, L., Braemar, S. Aberdeen, 23rd July, 1889. Name confirmed by Mr. A. Bennett. A highland form which I have under cultivation, and will report if it should prove a case of permanent divergence from the type.—Wm. R. Linton. "The specimens show they were gathered in shallow water, but the fruit is not materially different from similar specimens gathered from 'mud quite dry,' Kinghorn Loch, Fife, 1874.—J. Boswell Syme. The fruit is slightly smaller than in a specimen from Westerness, at 2,500 feet (Rev. E. S. Marshall), but this specimen has grown in water probably at least one foot deep. Unfortunately little information is given with continental specimens as to elevation. A specimen from Northern India, 9—10,000 feet alt., is only in flower, so no comparison can be made. The fruits of Mr. Linton's specimens are smaller than the usual lowland plant, but shew no tendency to approach *P. polygonifolius*."—Arthur Bennett.

P. fluitans, Roth. Wey and Arun Canal, Surrey and West Sussex, 5th August, 1888. I send a few more specimens of this, the type plant of Roth, according to Reichenbach.—W. H. Beeby.

P. heterophyllus × *Zizii? P. gramineus* var. *fluctuans*, Tiselius. Broker's Drain, Witcham Meadlands, Mepal, Cambridgeshire, 16th June, 1889.—A. Fryer. "I should not myself have referred this specimen to the *fluctuans* of Dr. Tiselius. It does not accord with the specimens of his plant he has kindly sent me. Whether it is *heterophyllus* × *Zizii* or not, Mr. Fryer is far more able to say from local knowledge than anyone seeing dried specimens can be."—Arthur Bennett.

P. nitens, "Weber." Canal, near Pirbright, 12th August, 1888.—W. H. Beeby.

P. nitens, Web., var. *salicifolius*, Fr. R. Laune, near Ballymalis Castle, Kerry, 27th July, 1889.—R. W. Scully. "I believe correct, though I have not been able to see typical specimens. The name is quoted of Koch, but Fries, Nov. Fl. Suec. 1828 is the earliest."—Arthur Bennett.

Potamogeton falcatus, Fryer. Stocking Fen, Ramsey, Hunts, 13th June, 1889.—A. Fryer. "Dr. Tiselius, of Stockholm, considers this to come under *P. nitens*."—Arthur Bennett.

P. ——. River Wye, 9th September, 1889. This is the prevailing form of the *lucens* group in the Herefordshire Wye. I believe it to be essentially the same as that sent by me to the Club in 1883, under the name of "*lucens acuminatus*," and referred by the authorities of the Club to *lucens*, not *acuminatus*. See Report, 1883, p. 95. "*Zizii*" has since that time been suggested as the right name for it, but I do not feel sure what it would now be called. I send it for further information.—Augustin Ley. "Mr. Ley's specimens are perhaps *Zizii*, bordering on *lucens*. Mr. Fryer would name them *lucens*."—Arthur Bennett.

P. perfoliatus, Linn , var. *gracilis*, Fries. Badric Lake, Anglesey, June, 1889. Confirmed by Mr. Arthur Bennett.—J. E. Griffith.

Scirpus parvulus, R. and S. River Cashen, near Ballybunion, Kerry, August, 1889.—R. W. Scully.

Blysmus rufus, var. *bifolius*, Wallr., Flor. Dan. tab. 2703. Valley, near Holyhead, June, 1889.—J. E. Griffith. The proper name of this is *Scirpus rufus*, subsp. *bifolius*, Lange, Hand. Danske Fl. 1864, p. 45. *S. bifolius*, Wallr. Sched. Crit. (1822), p. 27. *S. Tabernæmontani* β *monostachys*, Lange, l. c. Ed. I. (1850), p. 38. *Scirpus bifolius*, Wallr. habitu et rationibus quibusdam biologicis, non autem characteribus e flore fructuque sumtis differt e S. rufo Huds., quare hujus subspecies potius quam species distincta esse videtur. In Dania paucis modo locis occurrit et ubique rara esse videtur. Seminamatura non legi, quare an constans sit, culturâ probare non potui. Lange Nomenclator Florae Danicæ, 1887, p. 142; in Denmark occurring in Sjælland, Jylland, Slesvig, and Bornholm. I named this for Mr. Griffith in 1887. Fries, Nov. Fl. Suec. ed. 1 et ed. 2 (1828), p. 6, describes a var. β *balticus*, *minor*, *spiculis brevioribus*, *bracteis albomarginatis*. Schrad Germ. 1, p. 133. t. 1, f. 3.—Wallroth. β frequentior ad litora maris baltica ad Roslagiam usque.—Hartmann, Hand. Sk. Flora, ed. 11, p. 446, quotes the Herb. Nov. f. 12. no. 80 for this. I have not seen specimens. In his Fl. Scanica (1835), p. 186, Fries has a v. *major* ad Öresund multis locis. The Fl. Dan. pl. 2703 represents the bracts as 2—2½ inches long, and the spikes more agglomerated than in Mr. Griffith's specimens, but they are drawn from specimens in the early flowering stage."—Arthur Bennett.

Carex divulsa, Good. Swansea, Glamorganshire, 10th July, 1886. This has now been for two years under cultivation and it approaches nearer and nearer towards *muricata*. Mr. A. Bennett, to whom I referred specimens from Swansea, held that it must come under *divulsa*.—Wm. R. Linton.

C. aquatilis, Wahl. By old road to Kenmare, near Upper Lake, Killarney, 15th June, 1889.—R. W. Scully. "A not unusual form as it occurs in Sweden."—Arthur Bennett.

C. Goodenowii, J. Gay, form. Clova, Forfar, 12th July, 1889. This form, noticeable for its very short glumes, was growing at an

elevation of some 2,800 feet.—W. R. LINTON. "It is impossible to name or limit the variable states of this species, anyhow, at present."—Arthur Bennett.

Carex Goodenowii, J. Gay. Form approaching var. *juncella*, Fr. Brailsford, S. Derbyshire, 17th June, 1889.—W. R. LINTON. "May pass."—Arthur Bennett.

C. Goodenowii, J. Gay, var., *juncella*, Fr.? Alstonfield, &c., North Staffordshire, 1889. I have not, I think, noticed a record of *C. juncella* for this county and some at least of these specimens will be entitled to the name. The specimens were all growing in tufts over a good-sized piece of wet ground.—W. H. PURCHAS. "There are two plants from Alstonfield, one I should label '*Goodenowii* form' only, the other is undoubtedly close to var. *juncella*; the Beresford plant is a remarkably elongated form of *Goodenowii*."—Arthur Bennett. I take the opportunity afforded by the foregoing remarks of contributor and referee to enter a protest against the not uncommon practice of sending different forms of a critical plant to the Club without enclosing them in separate covers. To the collector it should be comparatively easy to separate the forms, but to the distributors, who are not usually *less* busy persons than other members, it is often a difficult task and one which certainly should not devolve upon them.—J.G.

C. elytroides, Fr. Near Holyhead, Anglesey, May, 1889. See Journal of Botany, April, 1889.—J. E. GRIFFITH.

C. montana, Linn., fide A. Bennett. Markland Grips, near Clowne, Derbyshire, June, 1889.—Coll. C. WATERFALL comm. W. H. PAINTER.

C. pilulifera, Linn, bracteate form. Braemar and Clova, 1889.—E. F. and W. R. LINTON. Mr. Bennett writes of the Braemar plant "An approach to the var. *longebracteata*, Lange, but only such." Of the Clova plant he writes "You may call this a 'bracteate form' but equally bracteate forms occur almost anywhere among a large series of the plant."

C. fulva × *Œderi*, Ehrh. Clova valley, near Bradoonie, Forfar, July, 1889. Recent seasons have been favourable to the production of this hybrid in the Clova valley, for we have found plenty of it in two spots a mile or two apart. We believe it to be the same hybrid in each case. The *flava* parent was taken from one of the localities, and our friend, Mr. Arthur Bennett, named it for us as *C. Œderi*, Ehrh. We have, therefore, labelled it as above instead of calling it *C. sterilis* or *C. xanthocarpa*, Degl.; and indeed we prefer the mode of labelling a hybrid with the name of its parent plants rather than with a third name, which suggests no hybrid origin. The plants now forwarded resembled *C. flava* (or *C. Œderi*) in their yellow-green colour, and more leafy growth; but were still more like *C. fulva* in habit; they were easily separated, however, from the latter, not only by colour, but by their hollow fruit, which collapsed when pinched; and whereas *C. fulva* has invariably (or almost so) *two* female spikelets at most, the hybrid frequently has three. We found a similar hybrid at Braemar about a fortnight later, but have not had

the *flava* parent authoritatively named as yet. Both parents were growing freely around in each case. The ground, of course, was wet, and rather boggy.—E. F. and W. R. Linton. "The plant may be *C. fulva*, Good. I do not see the suggested hybridity."—Arthur Bennett.

Carex flava, Linn., var. *lepidocarpa*, Tausch? Bog, Great Doward, Herefordshire, 7th June, 1889.—Augustin Ley. "I should strike out the *lepidocarpa*."—Arthur Bennett.

C. flava, Linn., var. *lepidocarpa* (Tausch). Glen Fiadh, Clova, Forfar, 13th July, 1889.—W. R. Linton. "If we consider this as a variety of *flava* its proper name is *C. flava*, Linn. var. *elatior*, Schlecht, in *Fl. Berol.* I. 477 (1823) fide Bailey, who saw a specimen in *Herb. Berol.*: if a species it is *C lepidocarpa*, Tausch, Flora, 1834, p. 129. Mr. Linton's plant agrees in the pedunculated male spike, but the stem is not scabrous enough, and the spikes are too long, they cannot be called ovate."—Arthur Bennett. Boggy wood, near Fownhope, Herefordshire, 26th July, 1888. The name was confirmed for me by the kindness of Mr. Arthur Bennett.—Augustin Ley.

C. paludosa, Good. var. *Kochiana*, Good. Near Penrhyn Lake, Valley, Holyhead, June, 1889. Confirmed by Mr. Arthur Bennett. New record for Anglesey.—J. E. Griffith.

Anthoxanthum odoratum, Linn., var. *villosum*, Dumort. Shirley and Bradley, S. Derbyshire, July, 1889. This is a wood form. A similar plant from a roadside was thus named for me by Mr. A. Bennett.—W. R. Linton. "Not var. *villosum*, only the typical form."—E. Hackel.

Agrostis canina, L., var. *scotica*, Hack. in lit. Quarzite screes of Ben Eay ascending to summit, West Ross, August, 1889. I first noticed form in 1887 and hoped it might be *A. rubra*, Wahl., but having this sent a good series to Professor Hackel he says "the plant is in some degree intermediate between *A canina* and *A. rubra*. The existence of such intermediate forms has already been mentioned by Berlin, 'Öfvers. Stock. R. Akad. Förhande,' 1884, p. 76, but he gave no name to any of them. I should like to name your *Agrostis A. canina* var. *scotica* and like *A. canina genuina* it offers two sub-varieties, *aristata* and *mutica*. The true *A. rubra* differs from it by its flat radical leaves, strongly tufted growth without runners, etc. From *A. canina genuina* your *A. canina scotica* differs by the lower culm, much greater spikelets, depauperate panicle, etc." The plant was very abundant on the mountain descending from the summit to about 900 feet, when a large flowered form of *A. canina*, which also occurred, replaced it as the moorland plant. On the neighbouring mountain Ben Slioch it also occurred, but much more sparingly; perhaps the latter being a sheep farm may account for its apparent scarcity. I do not remember having noticed it on the Cairngorm range. But I believe in 'Parnell's Grasses' there is a similar specimen from Forfarshire called *A. canina* L. var. *alpina*, Parnell.—G. Claridge Druce.

A. vulgaris, With. var. *pumila*, (Linn.) Near Maelog Lake, Anglesey, June, 1889.—J. E. Griffith. Confirmed by Prof. Hackel.

Deschampsia cæspitosa, Beauv. var. *pseudo-alpina*, Syme. Horses Glen, Mangerton, Kerry, 14th August, 1888.—R. W. Scully. Confirmed by Prof. Hackel.

D. cæspitosa, Beauv. var. *pallida*, Koch. Clova, Forfar, 11th July, 1889. Growing among a great quantity of *D. cæspitosa* of the ordinary hue, and in an open meadow, and therefore not to be explained away as merely a 'shade grown form' as was done with regard to this variety in B. E. C. Report for 1887.—E. F. and W. R. Linton. Confirmed by Prof. Hackel.

Avena fatua, Linn., var. *intermedia*, Lindgr. In clover crop, Sellack, Herefordshire, 17th and 19th September, 1889.—Augustin Ley. Cornfield, Ufton, Warwickshire, August, 1889.—H. Bromwich. Both confirmed by Prof. Hackel.

Kœleria cristata, Pers. var. *gracilis?* Croxton, Thetford, Norfolk, 14th June, 1889.—H. D. Geldart. "*K. cristata*, P. *genuina*."—E. Hackel.

Dactylis glomerata, Linn. Birstal, Leicestershire, June and July, 1889. This common grass varies so much in the size and form of the panicle that I have arranged half-a-dozen sets to show the extreme and intermediate conditions. The "luxuriant wood form with erect panicle" must be rather uncommon, I suppose. I have only observed it in one spinney near to my house. In this little plantation *Dactylis* flourishes, and the flowering stems are often six feet high. Tufts producing panicles, both with spreading and with erect branches, grow here abundantly, but the two forms are not produced from the same tufts, and they are permanent, not phases due to different stages of maturity.—F. T. Mott. Of the two wood forms sent by Mr. Mott, Prof. Hackel remarks:—"These forms do not agree exactly with the wood forms called *D. glomerata* var. *lobata* Drej., nor with var. *flaccida*."

D. glomerata, Linn. var. *congesta*, Coss. et Germ. Great Orme's Head, Carnarvonshire, May, 1889.—J. E. Griffith. Prof. Hackel writes:—"var. *abbreviata* Bernh. is an older name."

Poa nemoralis, Linn. Near Braemar, S. Aberdeen, 25th July, 1889. "A variety only slightly departing from the type." Prof. Hackel.—E. F. and Wm. R. Linton.

P. compressa, Linn. var. *polynoda*, (Parn.)? Yeldersley, S. Derbyshire, 20th June, 1889. This plant agreed with the book description of the variety in respect of the venation of the pale and position of the upper node, but book descriptions being so generally inadequate in anything of at all a critical character, I have only labelled it interrogatively.—Wm. R. Linton. Prof. Hackel writes of this:—"Common *P. compressa*, L."

Glyceria pedicellata, Towns. Abbotsleigh, North Somerset, 7th June, 1889. A grass that has been named *pedicellata*, and that possesses the chief characters said to mark the variety. But trifling deviations from the type *fluitans*, shading imperceptibly one into the other, are so frequent that I find much difficulty in laying hold of any salient points of distinction. It seems to come out clearly, however, that we should follow Syme in concluding that *pedicellata* would more

fittingly be placed under *eu-fluitans* than under *plicata* where it now stands.—J. W. White.

Bromus erectus, Huds., var. *subvillosus*, Revel. Chesterton, Warwickshire, July, 1889.—H. Bromwich. Confirmed by Prof. Hackel.

B. secalinus, L. St. Philip's Marsh, Bristol, W. Gloucestershire, 28th June, 1888. Rarely to be seen except on rubbish heaps close to the city.—J. W. White.

B. commutatus, Schrad. Burnham, N. Somerset and Stoke Gifford, W. Gloucestershire, June, 1888. Has the appearance of a native, in both counties being found among pasture grasses as well as on the borders of cultivated fields.—J. W. White.

B. mollis, Linn., var. Portland, Dorset, 28th May, 1889. Dwarf: awns pink, and tending to spread outwards. Mr. A. Bennett suggested *nanus* Weig. as the name of this variety, foreign specimens of which it agrees with except in its being decidedly smaller.—W. R. Linton. Prof. Hackel remarks: "Dwarf specimen, no variety."

B. mollis, L., var. *interrupta*, Hackel. See Report of 1888, p. 240. The specimens sent were from one tuft growing in a field near Goring, Oxfordshire, about 7 miles from the original station in Berks. June, 1889.—G. Claridge Druce. Confirmed by Prof. Hackel.

Brachypodium pinnatum, Beauv. var. *pubescens*, S. F. Gray. Ardley, Oxfordshire, on the Great Oolite, abundant, growing with the glabrous form, June, 1889.—G. Claridge Druce. Prof. Hackel writes of this "typical *pinnatum*."

Lolium perenne, Linn. var. *aristata*, Schum. Roadside, Upton, Warwickshire, August, 1889.—H. Bromwich. "*L. italicum*, A. Br."—E. Hackel.

Agropyron repens, Beauv., var. *obtusa*, Syme. Milverton, Warwickshire, August, 1889. H. Bromwich, comm. Mrs. Lomax. Prof. Hackel remarks "typical *A. repens*."

Athyrium Filix-fœmina, Roth. Mr. G. C. Druce sends, under sundry inconsequent names, a number of cultivated monstrosities of this species. I utterly fail to understand how anyone can derive pleasure or profit from contemplating the exquisite proportions of the Lady-fern tortured into hideous deformities, such as some of these. In accordance with the provisions of Rules 2 and 3 the specimens should have been consigned to the fire, but I have distributed them in case any members may think them of interest.—J. G.

A. flexile, Syme. Cultivated specimens from a root brought from Glen Eunach, Easterness, in 1888. Dr. Buchanan White agrees with me in giving it this name, but states that the fronds are not quite so long as in the typical state. Easterness is a new County record for this apparently rare fern.—G. Claridge Druce.

Lastræa uliginosa, Newm. Cultivated; originally from Norfolk.—G. C. Druce. "Should have called this *spinulosa*, not *uliginosa*."—J. G. Baker.

L. spinulosa, Presl, var. *elevatum*, A.Br. Old pool bed, Shobdon, Herefordshire, 14th September, 1889.—Augustin Ley. "Good *spinulosa*."—J. G. Baker.

Equisetum Moorei, Newm. Coast, Three Castle Head, Co. Wicklow, 6th June, 1889. These specimens were gathered too early in the year to show the pearly white sheath, with black top and base of the mature plant; they will, however, illustrate well the very different early state of this *Equisetum*.—R. W. SCULLY.

Tolypella intricata, Leonh. Marston, Oxon., Sept., 1889. The ditch in which it occurred was rather foul, and it was much mixed with dead leaves and refuse, while the plant was so brittle, or rather tender, as to break up even in pouring water on it to clean it.—G. CLARIDGE DRUCE.

NEW COUNTY RECORDS,

COMPRISING PLANTS NOT RECORDED FOR THEIR RESPECTIVE COUNTIES (OR VICE-COUNTIES) IN "TOPOGRAPHICAL BOTANY," ED. II., NOR IN THE RECENT REPORTS OF THIS CLUB.

Raphanus maritimus, Sm. 34. Gloster west: Bank of Avon, below Bristol, 3rd Aug., 1889. This is among the rarer Bristol species, and has hitherto been met with hereabout only on the coast of N. Somerset.—J. W. WHITE.

Polygala serpyllacea, Weihe. 90. Forfar: Glen Fiadh, July, 1889.—E. F. and W. R. LINTON.

Rosa mollis, Sm. 73. Kirkcudbright: Between Borgue and Girthon Kirk, Sept., 1889.—CHARLES BAILEY.

R. tomentosa, Sm. 73. Kirkcudbright: Gatehouse of Fleet, Sept., 1889.—CHARLES BAILEY.

R. tomentosa, Sm. (var. *subglobosa*). 74. Wigton, near Newton Stewart, Sept., 1889.—CHARLES BAILEY.

R. agrestis, Savi, Baker. 50. Denbigh: Limestone hill in the neighbourhood of Llandrillo-yn-Rhos, near Colwyn, June, 1889. This rose is frequent on the opposite cliffs on the Carnarvonshire side of boundary.—CHARLES BAILEY.

R. canina, Linn. 74. Wigton: near Whithorn, Sept., 1889.—CHARLES BAILEY. See p. 260.

Drosera anglica, Huds. 112. Shetland: Northmaven. To confirm record.—W. H. BEEBY.

Epilobium palustre, L. (var *lineare*). 72. Dumfries: Moffat, July, 1889.—W. R. LINTON.

Galium Mollugo, Linn. 92. Aberdeen, S., 23rd July, 1889. Apparently wild; growing along a fence in the outskirts of Braemar. If spontaneous will remove the doubt expressed in "Top. Bot.," Ed. II —W. R. LINTON.

Hieracium anglicum, Fr. (var. *longebracteatum*). 108. Sutherland,

W., Bettyhill, July, 1888.—E. F. and W. R. Linton. To remove doubt in "Top. Bot.," Ed. II.

Hieracium pallidum, Biv. (var. *Schmidtii*). 112. Shetland: Northmaven, July, 1889.—W. H. Beeby.

H. murorum, Linn. pt. 39. Stafford: Wetton Valley, June, 1889.—W. H. Purchas.

H. vulgatum, Fr. 37. Derby: Ashwood, July, 1887.—A. Ley.

Myosotis cæspitosa, Schultz. 52. Anglesea: near Maelog Lake.—J. E. Griffith.

Oxyria digyna, Hill. 112. Shetland: Roeness Voe, Mainland, July, 1889.—W. H. Beeby.

Hippophae rhamnoides, Linn. 52. Anglesea: Banks of Menai Strait, between Gallows Point and Beaumaris, May, 1889.—J. E. Griffith.

Potamogeton filiformis, Nolte. 96. Easterness, Nairn, July, 1884.—J. Groves.

Carex divulsa, Good. 41. Glamorgan: Oystermouth Castle, July, 1886.—W. R. Linton.

C. montana, Linn 37. Derby: Markland Grips, near Clowne, June, 1889.—C. Waterfall, comm. W. H. Painter.

Agrostis canina, Linn. 105. Ross, W.: Ben Eay, Aug., 1889.—G. C. Druce. See p. 274.

Kœleria cristata, Pers. Norfolk, W.: Croxton, Thetford, June, 1889.—H. D. Geldart.

Poa compressa, Linn. Derby: Yeldersley, June, 1889.—W. R. Linton.

*** Some *Rubi* are sent as New County records, but in the present state of knowledge of the genus I have not thought it desirable to include them in this list, for it really appears only occasionally to happen that two of the authorities agree as to the name a plant ought to bear.—J. G.

NOTES RELATING TO FORMER REPORTS.

Rubus adornatus, Müll. Gorstley Quarries, 25th September, 1888. In reply to Prof. Babington's query "Why *adornatus?*" (See Report 1888, p. 211), I wish to say that the specimens sent under this name in 1888 were from the identical bushes as those sent in 1886 (see Report 1886, p. 150), and in 1887 (Report 1887, p. 176). In 1888 the whole plant was more stunted and the specimens poor, owing perhaps to the cold wet season.—Augustin Ley.

R. serpens, Weihe. Woods, Beacon hill, 28th September, 1888. The Professor here asks "Whom does it come from?" The same

plant as that referred to *R. serpens* Weihe. by Dr. Focke (see Report 1887, p. 177). I say this with great confidence, after studying it in its native haunt. The specimens sent in 1888 were, however, finer and better grown than those of 1887. I have this year (1889) traced it a mile or two further south, in Chepstow Park Wood, Monmouthshire.—AUGUSTIN LEY.

Euphrasia officinalis, Linn. Mr. F. Townsend reports that the var. from Reay, Caithness, J. C. Melvill, is *E. Rostkoviana*, Hayne. Mr. Linton's specimens from Yeldersley, S. Derbyshire, Mr. Townsend names *E. nemorosa*, H. Mart.—G. C. DRUCE.

Mentha pubescens, Willd. To the Exchange Club distribution of 1886 I contributed numerous specimens of a mint grown in my garden from roots sent me by Mr. Curnow, of Cornwall, and to a specimen of which Mr. J. G. Baker had assented as to its name as representing the plant he described in the Journal of Botany for 1865, p. 242. On those specimens sent to the Club the Abbé C. A. Strail has commented in the Report issued in 1887, p. 187, and there says: "If I had found your mint in Belgium, I should certainly have given it another name, and should have placed it close to *M. nepetoides*, Lej." Mr. Baker says his plant is "*nepetoides* Koch, Fries," if so, it must be of Lejeune as Koch (Syn. Fl. Germ et Helv. ed. 2, p. 633), gives it as the plant of the "Flore de Spa, p. 116." Mr. Baker goes on to say that his own is exactly the *pubescens* of Willdenow; but I do not know on what he relies for this, as by the kindness of Dr. Schumann I have before me all the specimens of *M. aquatica* and *M. hirsuta* from the General and Willdenow Herbaria at Berlin, and there is *no specimen* in the collection subscribed to by Willdenow himself. Of the three sheets of Willdenow's collection No. 1 is a long petioled form of an ordinary *aquatica* as it grows in marshes. No. 2 is nearly the same, but paler in foliage. No. 3 is the less hairy form, with the upper leaves sub-petiolate smaller, and more pointed, darker in colour, calyx teeth shorter; usually a plant of more exposed situations than 1 and 2. Dr. Schumann thinks this latter to be the type of Willdenow's "*hirsuta*." Whether so, or not, it is perhaps now impossible to prove, but it is not the plant we name *pubescens* for certain! Our plant is contained in the collection under the name of "*M. pubescens*, Wirtgen," and again as "*M. pubescens*, W. Reich. Fl. G. n. 2090. Icon. pl. crit. 1309," from Wirtgen. Some one has written on the sheet "*M. nepetoides*, Lej." A sheet labelled "*M. hirsuta*, Wilmersdorf, Berlin, August, 1832, ex herb. Kunth," is also labelled "*M. aq. latifolia cordata minor* S. Lantzius Benings." Of this latter we have an exact counterpart in a plant I gathered on Mitcham Common, Surrey, but it is not the *pubescens*, Auct. Angl. I can come to no other conclusion than this, that *M. pubescens*, Willd. is merely a slight variety of the plant we name *aquatica*, and that the *M. pubescens*, Baker, is probably as Strail suggests the *M. nepetoides*, Lejeune, but I have seen no specimen from Lejeune.—ARTHUR BENNETT.